

### DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME: FT MEADE TIPTON AIRFIELD PARCEL RI - PO 0111169

**WESTON SOLUTIONS** 

1400 Weston Way

PO Box 2653

West Chester, PA - 19380

Phone No: 610-701-7400

ORDER ID: P5120

**ATTENTION: Nathan Fretz** 





1) GENERAL CHEMISTRY DATA	2
2) Signature Page	3
3) Case Narrative	4
4) Qualifier Page	5
5) Conformance/Non Conformance	6
6) QA Checklist	7
7) Chronicle	8
8) Sample Data	9
8.1) TAPIAL2-IDW-SOIL-120424-00-T2	10
9) QC Data Summary For Genchem	11
9.1) Initial and Continuing Calibration Verification	12
9.2) Initial and Continuing Calibration Blank Summary	13
9.3) Preparation Blank Summary	14
9.4) Duplicate Sample Summary	15
10) GENCHEM RAW DATA	17
10.1) GENCHEM RAW DATA - ANALYTICAL	18
10.1.1) LB133773	18
10.1.2) LB133786	21
10.2) GENCHEM RAW DATA - PREP	22
10.2.1) PB165379	22
10.2.2) PB165406	25
11) Analytical Runlogs	28
12) Standard Prep Logs	31
13) Percent Solid	56
14) Shipping Document	58
14.1) Chain Of Custody	59
14.2) Lab Certificate	60

P5120-GENCHEM **2 of 60** 



#### **Cover Page**

Order ID: P5120

**Project ID:** Ft Meade Tipton Airfield Parcel RI - PO 0111169

**Client:** Weston Solutions

Lab Sample Number Client Sample Number

P5120-01 TAPIAL2-IDW-SOIL-120424-00-T2

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 :

| APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:37 pm, Dec 13, 2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

P5120-GENCHEM 3 of 60



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

#### **CASE NARRATIVE**

**Weston Solutions** 

Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169

Project # N/A

**Chemtech Project # P5120** 

Test Name: Reactive Cyanide, Reactive Sulfide

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

1 Solid sample was received on 12/05/2024.

#### 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.

N. N. Pankya
Signature

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 1:38 pm, Dec 13, 2024

P5120-GENCHEM 4 of 60



#### 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  Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.							

Indicates the LCS did not meet the control limits requirements

Q

Н

P5120-GENCHEM **5 of 60** 

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: P5120 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: **REVIEWED QA REVIEW** By Sohil Jodhani, QA/QC Director at 11:52 am, Dec 13, 2024

P5120-GENCHEM 6 of 60





APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

Project #: P5120

•	
	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)	<u> </u>
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	<u>√</u> <u>√</u> <u>√</u>
Collect information for each project id from server. Were all requirements followed	<u> </u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u> </u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u>✓</u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u>✓</u>
Do requested analyses on Chain of Custody agree with the log-in page	\frac{\frac{\sqrt{\sq}}\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u>✓</u>
Were the samples received within hold time	<u>✓</u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u>✓</u>
Was client requirement followed?	<u>✓</u>
Does the case narrative summarize all QC failure?	<u>'</u> <u>'</u> <u>'</u>
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	✓

QA Review Signature: SOHIL JODHANI Date: 12/12/2024

P5120-GENCHEM 7 of 60

2

3

**5** 

7

10

13

-



#### LAB CHRONICLE

OrderID: P5120 OrderDate: 12/5/2024 10:59:00 AM

Client: Weston Solutions Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169

Contact: Nathan Fretz Location: L51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5120-01	TAPIAL2-IDW-SOIL-1	SOIL			12/04/24			12/05/24
	20424-00-T2				13:00			
			Reactive Cyanide	9012B		12/05/24	12/05/24	
							14:43	
			Reactive Sulfide	9034		12/06/24	12/06/24	
							12:48	

P5120-GENCHEM 8 of 60

2

5

5

6

1

9

4.4

12

Ιć



## SAMPLE DATA

9 of 60



Fax: 908 789 8922

#### **Report of Analysis**

Client: Weston Solutions Date Collected: 12/04/24 13:00 Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169 Date Received: 12/05/24 Client Sample ID: TAPIAL2-IDW-SOIL-120424-00-T2 SDG No.: P5120 Lab Sample ID: P5120-01 Matrix: **SOIL** % Solid: 79.8

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weigh	t) Prep Date	Date Ana.	Ana Met.	7
Reactive Cyanide	0.025	U	1	0.0088	0.025	0.050	mg/Kg	12/05/24 11:00	12/05/24 14:43	9012B	8
Reactive Sulfide	3.19	J	1	0.19	5.00	10.0	mg/Kg	12/06/24 08:50	12/06/24 12:48	9034	0

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

P5120-GENCHEM 10 of 60



# QC RESULT SUMMARY



Fax: 908 789 8922

#### **Initial and Continuing Calibration Verification**

Client: Weston Solutions SDG No.: P5120

Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169 RunNo.: LB133773

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Reactive	ICV1 Cyanide	mg/L	0.097	0.099	98	85-115	12/05/2024
Sample ID: Reactive	CCV1 Cyanide	mg/L	0.24	0.25	96	90-110	12/05/2024
Sample ID: Reactive	CCV2 Cyanide	mg/L	0.23	0.25	92	90-110	12/05/2024
Sample ID: Reactive	CCV3 Cyanide	mg/L	0.24	0.25	96	90-110	12/05/2024

P5120-GENCHEM 12 of 60



Fax: 908 789 8922

#### **Initial and Continuing Calibration Blank Summary**

Client: Weston Solutions SDG No.: P5120

Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169 RunNo.: LB133773

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: Reactive	ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	12/05/2024
Sample ID: Reactive	CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	12/05/2024
Sample ID: Reactive	CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	12/05/2024
Sample ID: Reactive	CCB3 Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	12/05/2024

P5120-GENCHEM 13 of 60

Fax: 908 789 8922

#### **Preparation Blank Summary**

Client: Weston Solutions SDG No.: P5120

**Project:** Ft Meade Tipton Airfield Parcel RI - PO 0111169

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB165 Reactive Sulfide	5379BL mg/Kg	< 5.0000	5.0000	U	0.186	10	12/06/2024
Sample ID: PB165 Reactive Cyanide	5406BL mg/Kg	< 0.0250	0.0250	U	0.0088	0.05	12/05/2024

P5120-GENCHEM 14 of 60



#### **Duplicate Sample Summary**

Client: Weston Solutions SDG No.: P5120

**Project:** Ft Meade Tipton Airfield Parcel RI - PO 0111169 **Sample ID:** P5095-04

Client ID: MH-764DUP Percent Solids for Spike Sample: 100

		Acceptance	Sample	Conc.	Duplicate	Conc.	Dilution	RPD/	0 1	Analysis	
Analyte	Units	Limit	Result	Qualifier	Result	Qualifier	Factor	AD	Qual	Date	
Reactive Cyanide	mg/Kg	+/-20	0.0087	U	0.0087	U	1	0		12/05/2024	

P5120-GENCHEM 15 of 60



Fax: 908 789 8922

#### **Duplicate Sample Summary**

Client: Weston Solutions SDG No.: P5120

**Project:** Ft Meade Tipton Airfield Parcel RI - PO 0111169 **Sample ID:** P5100-04

Client ID: 3167DUP 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		12/06/2024	

P5120-GENCHEM 16 of 60



### RAW DATA

1 2

10

Test results

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

12/5/2024 14:49

Test: Total CN

Sample Id	Result	Dil. 1	+ Response	Errors
ICV1 ICB1 CCV1 CCB1 PB165406BL P5095-04 P5095-04 P5096-04 P5096-08 P5100-04 P5103-02 P5110-01 P5110-02 P5112-02 CCV2 CCB2 P5120-01 PB165407BL P5100-03 P5103-03DUP P5103-01 CCV3 CCB3	96.579 0.030 241.189 -0.461 -0.572 -0.775 -0.710 -0.770 -0.727 -0.231 -0.644 -0.640 -0.634 -1.146 234.814 -0.812 -0.588 -0.735 -0.922 -1.131 -0.592 239.695 -0.412	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.072 0.002 0.176 0.002	
N Mean SD	23 34.774 83.1997			

P5120-GENCHEM

CV%

239.26

10

Aquakem v. 7.2AQ1

Results from time period:

Thu Dec 05 14:29:19 2024

Thu Dec 05 14:44:07 2024

1110 Dec 05 14.	44.072	2024			
Sample Id	San	n/Ctr/c/ Test short	t r Test type	e Result Result unit	Result date and time Stat
0.0PPBCN	Α	Total CN	Р	-0.6135 μg/l	12/5/2024 12:39:42
5.0PPBCN	Α	Total CN	Р	4.524 µg/l	12/5/2024 12:39:43
10PPBCN	Α	Total CN	P	9.5977 μg/l	12/5/2024 12:39:44
50PPBCN	Α	Total CN	Р	50.9497 μg/l	12/5/2024 12:39:45
100PPBCN	Α	Total CN	Р	100.7873 μg/l	12/5/2024 12:39:46
250PPBCN	Α	Total CN	Р	249.9889 μg/l	12/5/2024 12:39:47
500PPBCN	Α	Total CN	Р	499.766 µg/l	12/5/2024 12:39:48
ICV1	S	Total CN	Р	96.5794 μg/l	12/5/2024 14:29:20
ICB1	S	Total CN	Р	0.0295 μg/l	12/5/2024 14:29:21
CCV1	S	Total CN	Р	241.1891 μg/l	12/5/2024 14:29:23
CCB1	S	Total CN	Р	-0.4615 μg/l	12/5/2024 14:29:25
PB165406BL	S	Total CN	Р	-0.5 <b>72</b> 5 µg/l	12/5/2024 14:29:28
P5095-04	S	Total CN	Р	-0.7749 µg/l	12/5/2024 14:29:29
P5095-04DUP	S	Total CN	P	-0.7097 μg/l	12/5/2024 14:36:51
P5096-04	S	Total CN	Р	-0.7698 μg/l	12/5/2024 14:36:52
P5096-08	S	Total CN	Р	-0.727 µg/l	12/5/2024 14:36:53
P5100-04	S	Total CN	Р	-0.2306 μg/l	12/5/2024 14:36:54
P5103-02	S	Total CN	P	-0.6438 µg/l	12/5/2024 14:36:55
P5110-01	S	Total CN	Р	-0.6402 μg/l	12/5/2024 14:36:56
P5110-02	S	Total CN	Р	-0.6338 µg/l	12/5/2024 14:36:57
P5112-02	S	Total CN	Р	-1.1456 µg/l	12/5/2024 14:36:58
CCV2	S	Total CN	Р	234.8139 µg/l	12/5/2024 14:37:01
CCB2	S	Total CN	Р	-0.8117 μg/l	12/5/2024 14:43:58
P5120-01	S	Total CN	Р	-0.5884 μg/l	12/5/2024 14:43:59
PB165407BL	S	Total CN	Р	-0.7354 μg/l	12/5/2024 14:44:00
P5100-03	S	Total CN	Р	-0.9222 μg/l	12/5/2024 14:44:01
P5103-03DUP	S	Total CN	P	-1.1306 µg/l	12/5/2024 14:44:02
P5103-01	S	Total CN	P	-0.5915 μg/l	12/5/2024 14:44:03
CCV3	S	Total CN	Р	239.6954 µg/l	12/5/2024 14:44:06
CCB3	S	Total CN	P	-0.4123 µg/l	12/5/2024 14:44:07

P5120-GENCHEM 19 of 60

10

Calibration results

Aquakem 7.2AQ1

Page: 1

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

Reviewed by : NF

Instrument ID : Konelab

12/5/2024 12:40

Test Total CN

Accepted

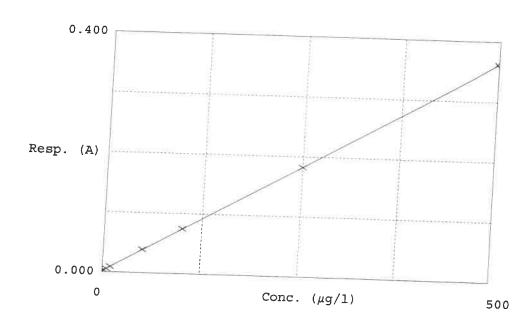
12/5/2024 12:40

Factor Bias

1388 0.002

Coeff. of det. 0.999989

Errors



	Calibrator	Response	Calc. con.	Conc.	Re Errors	
1 2 3 4 5 6 7	0.0PPBCN 5.0PPBCN 10PPBCN 50PPBCN 100PPBCN 250PPBCN 500PPBCN	0.002 0.005 0.009 0.039 0.075 0.182 0.362	-0.6135 4.5240 9.5977 50.9497 100.7873 249.9889 499.7660	0.0000 5.0000 10.0000 50.0000 100.0000 250.0000	-9.5 -9.0 1.9 0.5 0.0	NF 12.05-2024

P5120-GENCHEM

20 of 60

Analysis Method: 9034

Parameter: Reactive Sulfide

Run Number: LB133786

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	PB165379BL		1	5.00	50	2.00	0.00	1.94	1.94	0.06	0.00	0.00	12/06/2024	12:30
2	P5100-04		1	5.02	50	2.00	0.00	1.92	1.92	0.08	0.02	1.59	12/06/2024	12:33
3	P5100-04DUP		1	5.02	50	2.00	0.00	1.92	1.92	0.08	0.02	1.59	12/06/2024	12:36
4	P5103-02		1	5.07	50	2.00	0.00	1.88	1.88	0.12	0.06	4.73	12/06/2024	12:38
5	P5110-01		1	5.03	50	2.00	0.00	1.90	1.90	0.10	0.04	3.18	12/06/2024	12:40
6	P5110-02		1	5.03	50	2.00	0.00	1.92	1.92	0.08	0.02	1.59	12/06/2024	12:42
7	P5112-02		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	12/06/2024	12:45
8	P5120-01		1	5.01	50	2.00	0.00	1.90	1.90	0.10	0.04	3.19	12/06/2024	12:48
9	P5133-02		1	5.07	50	2.00	0.00	1.86	1.86	0.14	0.08	6.31	12/06/2024	12:50
10	P5136-02		1	5.05	50	2.00	0.00	1.88	1.88	0.12	0.06	4.75	12/06/2024	12:53

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



#### Soil/Sludge Reactive Sulfide Preparation Sheet

PB165379

SOP ID:

M9030B-Sulfide-12

SDG No:

N/A

Start Digest Date: 12/06/2024

Time: 08:50

Temp: N/A

Matrix:

SOIL WC

End Digest Date: 12/06/2024

Time: 10:20

Temp: N/A

Pippete ID:

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:

Weigh By:

pH Meter ID: N/A

Supervisor Signature:

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.5M ZINC ACETATE	5.0ML	WP108780
FORMALDEHYDE	2.0ML	W2725
N/A	N/A	N/A

**Extraction Conformance/Non-Conformance Comments:** 

12/06/2024

N/A

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







Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	рН	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P5100-04	3167	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P5100-04DUP	3167DUP	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P5103-02	423	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
P5110-01	ELIZ-COMP-1	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5110-02	ELIZ-COMP-2	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
25112-02	10TH-ST-SOIL	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
25120-01	TAPIAL2-IDW-SOIL-120424-0 0-T2	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
25133-02	MOO-24-00374	5.07	50	N/A	N/A	N/A	N/A	N/A	N/A
5136-02	COMP-1	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
B165379BL	PBS379	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A

# WORKLIST(Hardcopy Internal Chain)

			Date: 12-06-2024 08:15:16 e Collect Date Method		7000 7000/70	12/04/2024 9034	12/04/2024 9034	7000170	12/04/2024 9034	12/04/2024 9034		12/03/2024 9034	11/27/2024 0034	9006 + 3076	12/05/2024 9034	12/05/2024	- TO 707 (C)
		Ž	<u>ā</u>	Location	L61 12#		L51 12/(	141		L41 12/0	151		L51 11/2		L61 12/0	L61 12/0	
	hain)	Distillation		The latest and the la	PSEG03		PSEG03	PSEG03		PSEG03	TULL02		WEST04	8000	13EGU3	PSEG03	
	KLIST(Hardcopy Internal Chain)	Department :	Preservative		Cool 4 deg C	Cool A dog	O fian t loop	Cool 4 deg C	0.001/1000	O Report	Cool 4 deg C	0 200 7	Cool 4 deg C	Cool 4 den C		Cool 4 deg C	
	WORKLIST(H	186	Test		Reactive Sulfide	Reactive Sulfide		Reactive Sulfide	Reactive Sulfide	Doodless Ones	reactive Sulfide	Reactive Sulfide		Reactive Sulfide	Dooding O. In.	I VERCUNE SUILIDE	
		WorkList ID :	Matrix		pilos	Solid	Pilo	Dilloo	Solid	rilov.	- 1	Solid		Solid	Filos		
		rsul 1206	Customer Sample	3167	400	423	ELIZ-COMP-1		ELIZ-COMP-2	10TH-ST-SOIL		IAPIALZ-IDW-SOIL-120424-00.	MOO 24 00374	24-003/4	COMP-1		
		WorkList Name:	Sample	P5100-04	P5103-02	70-0010	P5110-01	D5110_02	70.01	P5112-02	P5120-01		P5133-02		P5136-02		
P	5120-0	GENC	CHEM														

12/05/2024 9034

Date/Time 12/06/2024 Raw Sample Received by:

Raw Sample Relinquished by:
10
11
12
13

Page 1 of 1

Raw Sample Received by: Date/Time 12/06/2020

Raw Sample Relinquished by:



#### Soil/Sludge Reactive Cyanide Preparation Sheet

PB165406

Temp: N/A

10

Time: 11:00

SOP	ID:	M9012B-Total, Amenable and Reactive	Cyanido.	20
		mooted local, Allieliable alia Reactive	Cvanice-2	Z U

industrial industrial

SDG No : N/A Start Digest Date: 12/05/2024

Matrix: SOIL End Digest Date: 12/05/2024 Time: 12:30 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:

Weigh By: NF pH Meter ID: N/A Supervisor Signature:

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

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	N/A	WP108640
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
12.05.2024, 19:40	NF(wc)	NFIWE
	Preparation Group	Analysis Group



Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	рН	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P5095-04	MH-764	5.05	50	N/A	N/A	N/A	N/A	N/A	N/A
P5095-04DUP	MH-764DUP	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5096-04	мн-в	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P5096-08	мн-а	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
P5100-04	3167	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5103-02	423	5.02	50	N/A	N/A	N/A	N/A	N/A	N/A
25110-01	ELIZ-COMP-1	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
75110-02	ELIZ-COMP-2	5.04	50	N/A	N/A	N/A	N/A	N/A	N/A
5112-02	10TH-ST-SOIL	5.03	50	N/A	N/A	N/A	N/A	N/A	N/A
5120-01	TAPIAL2-IDW-SOIL-120424-0 0-T2	5.01	50	N/A	N/A	N/A	N/A	N/A	N/A
B165406BL	PBS406	5.00	50	N/A	N/A	N/A	N/A	N/A	N/A

# WORKLIST(Hardcopy Internal Chain)

WorkList Name:	RCN S-12052024	WorkList ID:	D: 186008		:			
				Department:	Distillation	Date:	12-05-2024 10:37:50	7:50
oampie	Customer Sample	Matrix	Test	Preservative	Customer	ple	Collect Date Method	P
P5095-04	MH-764	7:100				Location		
00000		Diloc	Reactive Cyanide	Cool 4 deg C	DOELOGO			
13080-04	MH-B	Solid	Reactive Cyanida		1 35 303	L11	12/04/2024 9012B	
P5096-08	MH-A		anii anii anii anii anii anii anii anii	Cool 4 deg C	PSEG03	L51	12/04/2024 00425	
00700		Solid	Reactive Cyanide	Cool 4 dea C	DOECON		87108 +303/L0/31	
F3100-04	3167	Solid	Describe Comment	ò	135003	L51	12/04/2024 9012B	
P5103-02	400		Incacure Cyanide	Cool 4 deg C	PSEG03	8		T
70.00	423	Solid	Reactive Cvanido			201	12/04/2024 9012B	
P5110-01	ELIZ-COMP-1		aning change	Cool 4 deg C	PSEG03	L51	12/04/2024 00125	
DE 440 00	-	pilos	Reactive Cyanide	Cool 4 dea C	Dercos		97106 F307 01.7B	
F9110-02	ELIZ-COMP-2	Solid	Reactive C. Line		135503	L41	12/04/2024 9012B	
P5112-02	10TU OF CO.		reactive cyanide	Cool 4 deg C	PSEG03	41		
	JOS-18-JOIL	Solid	Reactive Cvanide				12/04/2024 9012B	
P5120-01	TAPIAL2-IDW-SOII -120424 08	1 2 2		Cool 4 deg C	TULL02	L51	12/05/2024 90128	
		Dilloc	Reactive Cyanide	Cool 4 deg C	WEST04	- L		
						- 3	11/27/2024 9012R	_

11/27/2024 9012B

Date/Time 12 05 2024 Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

WorkList Name: RCN S-12052024

Date/Time 12.05 2024

Raw Sample Relinquished by: Raw Sample Received by:



**Instrument ID:** 

KONELAB

#### Daily Analysis Runlog For Sequence/QCBatch ID # LB133773

Review By	Nih	ıa	Review On	12/6/2024 4:53:14 PM
Supervise By	lwc	ona	Supervise On	12/6/2024 4:54:06 PM
SubDirectory	LB	133773	Test	Reactive Cyanide
STD. NAME	STD. NAME STD REF.#			
ICAL Standard		WP110951,WP110952,V	WP110953,WP110954,WP110955,WP1	10956,WP110957
ICV Standard		WP110964		
CCV Standard		WP110952		
ICSA Standard		N/A		
CRI Standard		N/A		
LCS Standard		N/A		
Chk Standard		WP109068,WP110103,	WP110958	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	12/05/24 12:39		Niha	ок
2	5.0PPBCN	5.0PPBCN	CAL2	12/05/24 12:39		Niha	ок
3	10PPBCN	10PPBCN	CAL3	12/05/24 12:39		Niha	ОК
4	50PPBCN	50PPBCN	CAL4	12/05/24 12:39		Niha	ОК
5	100PPBCN	100PPBCN	CAL5	12/05/24 12:39		Niha	ОК
6	250PPBCN	250PPBCN	CAL6	12/05/24 12:39		Niha	ок
7	500PPBCN	500PPBCN	CAL7	12/05/24 12:39		Niha	ок
8	ICV1	ICV1	ICV	12/05/24 14:29		Niha	ОК
9	ICB1	ICB1	ICB	12/05/24 14:29		Niha	ок
10	CCV1	CCV1	CCV	12/05/24 14:29		Niha	ОК
11	CCB1	CCB1	ССВ	12/05/24 14:29		Niha	ок
12	PB165406BL	PB165406BL	МВ	12/05/24 14:29		Niha	ОК
13	P5095-04	MH-764	SAM	12/05/24 14:29		Niha	ОК
14	P5095-04DUP	MH-764DUP	DUP	12/05/24 14:36		Niha	ОК
15	P5096-04	МН-В	SAM	12/05/24 14:36		Niha	ок
16	P5096-08	MH-A	SAM	12/05/24 14:36		Niha	ок
17	P5100-04	3167	SAM	12/05/24 14:36		Niha	ок
18	P5103-02	423	SAM	12/05/24 14:36		Niha	ОК

P5120-GENCHEM **28 of 60** 

2

3

5

7

10 11

12



**Instrument ID:** 

KONELAB

#### Daily Analysis Runlog For Sequence/QCBatch ID # LB133773

Review By	Nih	ıa	Review On	12/6/2024 4:53:14 PM
Supervise By	lwc	ona	Supervise On	12/6/2024 4:54:06 PM
SubDirectory	LB	133773	Test	Reactive Cyanide
STD. NAME	STD. NAME STD REF.#			
ICAL Standard		WP110951,WP110952,V	WP110953,WP110954,WP110955,WP1	10956,WP110957
ICV Standard		WP110964		
CCV Standard		WP110952		
ICSA Standard		N/A		
CRI Standard		N/A		
LCS Standard		N/A		
Chk Standard		WP109068,WP110103,	WP110958	

					-		
19	P5110-01	ELIZ-COMP-1	SAM	12/05/24 14:36		Niha	ОК
20	P5110-02	ELIZ-COMP-2	SAM	12/05/24 14:36		Niha	ОК
21	P5112-02	10TH-ST-SOIL	SAM	12/05/24 14:36		Niha	ОК
22	CCV2	CCV2	CCV	12/05/24 14:37		Niha	ОК
23	CCB2	CCB2	ССВ	12/05/24 14:43		Niha	ОК
24	P5120-01	TAPIAL2-IDW-SOIL-1	SAM	12/05/24 14:43		Niha	ОК
25	PB165407BL	PB165407BL	МВ	12/05/24 14:44		Niha	ОК
26	P5100-03	3154	SAM	12/05/24 14:44		Niha	ОК
27	P5100-03DUP	3154DUP	DUP	12/05/24 14:44		Niha	OK
28	P5103-01	422	SAM	12/05/24 14:44		Niha	OK
29	CCV3	CCV3	CCV	12/05/24 14:44		Niha	OK
30	CCB3	CCB3	ССВ	12/05/24 14:44		Niha	ОК

P5120-GENCHEM 29 of 60

9

3

5

7

9

11





**Instrument ID:** 

TITRAMETRIC

#### Daily Analysis Runlog For Sequence/QCBatch ID # LB133786

Review By	rub	ina	Review On	12/6/2024 2:57:34 PM
Supervise By	lwc	ona	Supervise On	12/6/2024 4:12:10 PM
SubDirectory	LB	133786	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	PB165379BL	PB165379BL	МВ	12/06/24 12:30		rubina	ок
2	P5100-04	3167	SAM	12/06/24 12:33		rubina	ОК
3	P5100-04DUP	3167DUP	DUP	12/06/24 12:36		rubina	ОК
4	P5103-02	423	SAM	12/06/24 12:38		rubina	ОК
5	P5110-01	ELIZ-COMP-1	SAM	12/06/24 12:40		rubina	ОК
6	P5110-02	ELIZ-COMP-2	SAM	12/06/24 12:42		rubina	ОК
7	P5112-02	10TH-ST-SOIL	SAM	12/06/24 12:45		rubina	ОК
8	P5120-01	TAPIAL2-IDW-SOIL-1	SAM	12/06/24 12:48		rubina	ОК
9	P5133-02	MOO-24-00374	SAM	12/06/24 12:50		rubina	ОК
10	P5136-02	COMP-1	SAM	12/06/24 12:53		rubina	ок

P5120-GENCHEM 30 of 60

-

3

5

7

10

11





#### **Prep Standard - Chemical Standard Summary**

Order ID: P5120

**Test:** Reactive Cyanide, Reactive Sulfide

**Prepbatch ID:** PB165379,PB165406,

Sequence ID/Qc Batch ID: LB133773,LB133786,

#### Standard ID:

WP108640, WP108780, WP109068, WP109549, WP110103, WP110950, WP110951, WP110952, WP110953, WP110954, WP110955, WP110956, WP110957, WP110958, WP110964, WP10956, WP110957, WP110958, WP110964, WP10956, WP110959, WP1109

#### Chemical ID:

E3657,M5929,W2668,W2725,W2882,W2926,W3019,W3105,W3112,W3114,W3138,W3139,W3149,W3154,

P5120-GENCHEM 31 of 60

1

2

1

5

<del>,</del>

8

11

12

13



Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
11	,	WP108640	07/05/2024	01/05/2025	Rubina Mughal	_		•
	solution 0.25 N					CALE_4 (WC		07/08/2024
EDOM.	21 00000L of W3112 + 210 00000gra	m of F3657	= Final Qua	ntity: 21 000 L		SC-4)		

-ROM	21.00000L of W3112	+ 210.00000gram of E3657	= Final Quantity: 21.000 L

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
160	0.5M ZINC ACETATE	WP108780	07/22/2024	12/08/2024	Rubina Mughal	_	_	
						CALE_5 (WC	IPETTE_3	07/23/2024

FROM 0.88900L of W3112 + 1.00000ml of M5929 + 110.00000gram of W2926 = Final Quantity: 1000.000 ml

P5120-GENCHEM 32 of 60



Recipe				Expiration	Prepared			Supervised By		
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych		
607	PYRIDINE-BARBITURIC ACID	WP109068	08/06/2024	12/08/2024	Niha Farheen	WETCHEM_S	None	•		
					Shaik	CALE_5 (WC		08/07/2024		
FROM	SC-5)									

ROM 145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M5929 + 75.00000ml of W3019 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	PipetteID	Supervised By
3371	Cyanide LCS Spike Solution, 5PPM	WP109549	09/06/2024		Niha Farheen Shaik	None	WETCHEM_F IPETTE_3	lwona Zarych 09/06/2024

FROM 1.00000ml of W3138 + 199.00000ml of WP108640 = Final Quantity: 200.000 ml

P5120-GENCHEM 33 of 60



Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych	
539	CN BUFFER	WP110103	10/08/2024	04/08/2025	Rubina Mughal		None		
						CALE_5 (WC		10/08/2024	
FROM	FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml								

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3456	Cyanide Intermediate Working Std, 5PPM	<u>WP110950</u>	12/05/2024	12/06/2024	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3 (WC)	12/06/2024

FROM 0.25000ml of W3154 + 49.75000ml of WP108640 = Final Quantity: 50.000 ml

P5120-GENCHEM 34 of 60



Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
4	Calibation standard 500 ppb	WP110951	12/05/2024	12/06/2024	Niha Farheen	None	None	iwena zaryen
					Shaik			12/06/2024
	45.00000 L (MD400040 : 5.00000	1 CMD44	0050 F: I	0 " 50.0				

<b>FROM</b> 45.00000ml of WP108640 + 5.00000ml of WP110950 = Final Quantity: 50.00	0 ml
--	------

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarvch
	Calibration-CCV CN Standard 250 ppb	<u>WP110952</u>	12/05/2024	12/06/2024	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3 (WC)	, .

**FROM** 2.50000ml of WP110950 + 47.50000ml of WP108640 = Final Quantity: 50.000 ml

P5120-GENCHEM **35 of 60** 

2

\_

4

6

8

11

12

. .



Recipe ID 6	NAME Calibration Standard 100 ppb	<u>NO.</u> WP110953	Prep Date 12/05/2024	Expiration Date 12/06/2024	Prepared By Niha Farheen Shaik	ScaleID None	PipetteID WETCHEM_F IPETTE_3	Supervised By Iwona Zarych		
FROM	(WC)									

7 Calibration Standard 50 ppb WP110954 12/05/2024 12/06/2024 Niha Farheen Shaik None WETCHEM_F IPETTE_3 12/06/2024	Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
	7	Calibration Standard 50 ppb	<u>WP110954</u>	12/05/2024	12/06/2024		None	IPETTE_3	

FROM 0.50000ml of WP110950 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml

P5120-GENCHEM 36 of 60



### Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
8	Calibration Standard 10 ppb	<u>WP110955</u>	12/05/2024	12/06/2024	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3	12/06/2024
FROM	1.00000ml of WP110951 + 49.00000	ml of WP10	8640 = Final	Quantity: 50.0	00 ml		(WC)	

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
9	Calibration Standard 5 ppb	<u>WP110956</u>	12/05/2024	12/06/2024	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3	12/06/2024

FROM 0.50000ml of WP110951 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml

P5120-GENCHEM 37 of 60



### Wet Chemistry STANDARD PREPARATION LOG

Recipe ID 167	NAME 0 ppb CN calibration std	<u>NO.</u> WP110957	Prep Date 12/05/2024	<u> </u>	Prepared By Niha Farheen Shaik	<u>ScaleID</u> None	PipetteID None	Supervised By Iwona Zarych 12/06/2024
FROM	50.00000ml of WP108640 = Final Q	uantity: 50.0	000 ml					

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
1582	Chloramine T solution, 0.014M	WP110958	12/05/2024	12/06/2024	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC	None	12/06/2024

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

P5120-GENCHEM 38 of 60

\_

4

7

9

12



# Wet Chemistry STANDARD PREPARATION LOG

Recipe ID 2168	NAME RCN ICV STD, 100 PPB	<b>NO.</b> WP110964	Prep Date 12/05/2024	Expiration Date 12/06/2024	Prepared By Niha Farheen Shaik	<u>ScaleID</u> None	PipetteID None	Supervised By Iwona Zarych 12/06/2024
FROM	1.00000ml of WP109549 + 49.00000	ml of WP10	8640 = Final	Quantity: 50.00	00 ml			

P5120-GENCHEM **39 of 60** 



# **CHEMICAL RECEIPT LOG BOOK**

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/08/2024	06/24/2024 / Al-Terek	06/07/2024 / Al-Terek	M5929
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 / apatel	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,AC S,500G	383058	07/05/2027	07/05/2022 / ketankumar	07/05/2022 / ketankumar	W2926

P5120-GENCHEM 40 of 60



# **CHEMICAL RECEIPT LOG BOOK**

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
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL69870-8 / SODIUM THIOSULFATE,0.025N,4LIT RE	4403S13	09/30/2025	04/22/2024 / Iwona	04/22/2024 / Iwona	W3105
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	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 /	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

P5120-GENCHEM 41 of 60



### **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	LOT	06/30/2025	12/02/2024 / Iwona	12/02/2024 / Iwona	W3154

4

8

9

11

12

13

. .

W3019 lec 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

**Product Name:** 

**Certificate of Analysis** 

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
nfrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	> 99.75 %	99.99 %
Vater (by Karl Fischer)	_ < 0.003 %	0.002 %
Residue on Evaporation	_ < 0.0005 %	< 0.0001 %

Larry Coers, Director **Quality Control** 

Sheboygan Falls, WI US

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





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	Re	quirement	Results	Units
	Min.	Max.		
Assay	36.5	38.0	36.71	%
Chloride (CI)		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

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

1/1

P5120-GENCHEM 44 of 60



12/14/2022

12/31/2025

# **Sodium Hydroxide (Pellets)**

Material:

0583

**Grade:** 

**ACS GRADE** 

**Batch Number:** 

23B1556310

Chemical Formula:

NaOH

Molecular Weight:

CAS#:

1310-73-2

Appearance:

Storage:

Manufacture Date:

**Expiration Date:** 

Room Temperature

Pellets

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

Internal ID#: 710

#### Signature

We certify that this batch conforms to the specifications listed.

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

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

#### Additional Information

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

Product meets analytical specifications of the grades listed.

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

02/15/2023

Page 1 of 2



1.00132.0000 Barbituric acid for analysis EMSURE® N020065932

	Spec. Values	3	Batch Values	
Assay (acidimetric)	≥ 99	%	99.6	%
Identity (IR-spectrum)	passes test		passes test	
Chloride (CI)	≤ 40	ppm	≤ 40	ppm
Heavy metals (as Pb)	≤ 50	ppm	≤ 50	ppm
Fe (Iron)	≤ 10	ppm	≤ 10	ppm
Sulfated ash	≤ 0.1	%	≤ 0.1	%
Loss on Drying (105 °C)	≤ 0.1	%	≤ 0.1	%
Suitability as reagent (for cyanide determination)	passes test		passes test	

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

Ioannis Chartomatsidis

Responsible laboratory manager quality control

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

3

5

8

10

12

Ш

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 (NaH2PO4 · H2O)	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 (CI)	<= 5 ppm	< 5
ACS – Sulfate (SO <sub>4</sub> )	<= 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



<u>၊</u>

3

5

0

10

12

13

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA:

techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Name:

Certificate of Analysis

Zinc acetate dihydrate - ACS reagent, ≥98%

Product Number:

383058

Batch Number:

MKCQ9159

Brand:

SIGALD

CAS Number:

5970-45-6

MDL Number:

MFCD00066961

Formula:

04110047- 01100

romula.

Test

C4H6O4Zn · 2H2O

Formula Weight:

219.51 g/mol

Quality Release Date:

06 JAN 2022

0 H<sub>3</sub>C O]<sub>2</sub> Zn<sup>2</sup>· · 2H<sub>2</sub>O

Specification Result

	99	
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

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

W3105 Received on 4/22/24 by IZ

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

customerservice@riccachemical.com

# 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)

Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 1 of 2

P5120-GENCHEM 49 of 60

Hand Brandon

Paul Brandon (03/29/2024)

**Production Manager** 

This document is designed to comply with ISO Guide 31 "Reference Materials  $^{\rm --}$  Contents of Certificates and Labels."

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

Version: 1.3 Lot Number: 4403S13 Product Number: 7900 Page 2 of 2

P5120-GENCHEM 50 of 60



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

customerservice@riccachemical.com

# Certificate of Analysis

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

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#
Ī	Appearance	Dark brown liquid	Passed	
	Assay (vs. Sodium Thiosulfate/Starch)	$0.02498 \text{-} 0.02502 \text{ N} \text{ at } 20^{\circ}\text{C}$	$0.02502~\mathrm{N}$ at $20^{\circ}\mathrm{C}$	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

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

Version: 1.3 Lot Number: 2405D89 Product Number: 3975 Page 1 of 1

P5120-GENCHEM 51 of 60



#### 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	3/35/36/365	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 Montelsons

P5120-GENCHEM 52 of 60

3

4

6

4 6

111

13



W3139 Received on 9/9/24 by IZ

Product No.: A12044

Product: Chloramine-T trihydrate, 98%

Lot No.: 10239484

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

Order our products online thermofisher.com/chemicals

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

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

P5120-GENCHEM 53 of 60

-

4

6

8

10

4 0

13

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

customerservice@riccachemical.com

# 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	Passed
	(Iodine present)	

Specification	Reference
Starch Solution	APHA (4500-S2- F)
Starch Indicator Solution	APHA (4500-C1 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-C1 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	pe 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)

Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 1 of 2

P5120-GENCHEM 54 of 60

Paul Brandon (08/28/2024)

Production Manager

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

Version: 1.3 Lot Number: 4408P62 Product Number: 8000 Page 2 of 2

P5120-GENCHEM 55 of 60



#### PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh

**Date:** 12/6/2024

OVENTEMP IN Celsius(°C): 107 OVENTEMP OUT Celsius(°C): 103

Time IN: 17:00 Time OUT: 08:15

In Date: 12/05/2024 Out Date: 12/06/2024

Weight Check 1.0g: 1.00 Weight Check 1.0g: 1.00 Weight Check 10g: 10.00 Weight Check 10g: 10.00 OvenID: M OVEN#1 BalanceID: M SC-4

Thermometer ID: % SOLID- OVEN

**QC:**LB133767

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
P5112-01	10TH-ST-SOIL	1	1.15	8.38	9.53	8.81	91.4	
P5113-01	FES-SB406-4345	2	1.15	8.81	9.96	8.94	88.4	
P5113-02	FES-SB406-7375	3	1.15	8.61	9.76	7.93	78.7	
P5117-01	TAPIAL3-SB04I-10-12032 4-00-T1	4	1.15	8.59	9.74	9.37	95.7	
P5117-02	TAPIAL2-IDW-SOIL-12042 4-00-T2	5	1.15	8.38	9.53	7.84	79.8	
P5120-01	TAPIAL2-IDW-SOIL-12042 4-00-T2	6	1.15	8.38	9.53	7.84	79.8	
P5133-01	MOO-24-00374	9	1.15	8.35	9.5	9.14	95.7	
P5134-01	MOO-24-00373	10	1.00	1.00	2.00	2.00	100.0	debris
P5135-01	LAW-23-00193	11	1.16	8.44	9.6	9.05	93.5	
P5136-01	COMP-1	12	1.16	8.49	9.65	7.26	71.8	
P5137-01	LAW-OILY-STONES	13	1.00	1.00	2.00	2.00	100.0	oily stone
P5137-02	LAW-OILY-STONES-E2	14	1.00	1.00	2.00	2.00	100.0	oily stone
P5144-01	60400	15	1.00	1.00	2.00	2.00	100.0	wipe sample
P5147-01	EX-8-TPH-1	7	1.15	8.82	9.97	8.29	81.0	
P5147-02	EX-8-TPH-2	8	1.15	8.76	9.91	8.1	79.3	

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

P5120-GENCHEM 56 of 60

WorkList ID: 185988

WORKLIST(Hardcopy Internal Chain)

49+5C) CM

ΕN	. District Maille	/o I = 1 20524	WorkList ID:	185988	Department:	Wet-Chemistry	1			
CH			100			rot chemistry	Õ	Date: 12-05-2(	12-05-2024 08:21:57	
HEM	Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method	Method	
	P5112-01	10TH ST SO.	Ш							
		JOSE ISSUED	Solid	Percent Solids	Cool 4 den C					
	P5113-01	FES-SB406-4345	Solid	Parcent Colida	550	I ULL02	L51	12/05/2024	Chemtech -So	
	P5113-02	110000000000000000000000000000000000000	1	Spilos il solida	Cool 4 deg C	TETR06	L31	12/04/2024	Chomtod	
	70.00	res-58406-/3/5	Solid	Percent Solids	Cool 4 dea C			170711011	Oc- Dalliello	
	P5117-01	TAPIAL3-SB04I-10-120324-00-	Solid	Percent Collab	O Rep to Co	IETR06	L31	12/04/2024	Chemtech -So	
	P5117-02	TAPIAI 2-IDM COLL		Spilos Juga	Cool 4 deg C	WEST04	L41	12/05/2024	Chemtech -SO	
			Solid	Percent Solids	Cool 4 dea C	MESTON				
	P5120-01	TAPIAL2-IDW-SOIL-120424-00.	Solid	Percent Solids		WE3104	L41	12/05/2024	Chemtech -SO	
	P5133-01	1200 10 OOM		epiloo tiloolo	Cool 4 deg C	WEST04	L51	11/27/2024	Chomtoch	
		MOO-24-003/4	Solid	Percent Solids	Cool 4 dea C	100		1303113111	OC- III GOING	
	P5134-01	MOO-24-00373	Silos:	Sorosat Option		PSEG03	L61	12/05/2024	Chemtech -SO	
	P5135_01			reicent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	1000	
	10000	LAVV-23-00193	Solid F	Percent Solids	Cool 4 dea C			1707/00/71	OS- Maille Ch	
	P5136-01	COMP-1	Solid	Percent Colido		PSEG03	L51	12/05/2024	Chemtech -SO	
2	P5137-01	LAW-Oll Y-STONES		Spino Hoose	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO	
1_		CEL CICIES	Solid	Percent Solids	Cool 4 deg C	PSEG03	- 64			
	P5137-02	LAW-OILY-STONES-E2	Solid	Percent Solids		2000	L01	12/05/2024	Chemtech -SO	
	P5147-01		1	2000	Cool 4 deg C	PSEG03	191	12/05/2024	Chomtoch	
		EA-6-1PH-1	Solid	Percent Solids	Cool 4 dea C	ENTAGE		1707/00/11	Or- Upallifection	
	P5147-02	EX-8-TPH-2	Filos			CINIAUS	L41	12/05/2024	Chemtech -SO	
				rercent Solids	Cool 4 deg C	ENTA05	L41	12/05/2024	12/05/2024 Chemtech -SO	
									0	

Date/Time )2) 05|29

01:27

Raw Sample Received by:

Raw Sample Relinquished by:

Page 1 of 1

Raw Sample Relinquished by: RJ Cに代し(ab)

Raw Sample Received by: 78 (49)

Date/Time 12/05/24 15:40

57 of 60

**WorkList Name:** %1-120524



# SHIPPING DOCUMENTS

1/

P5120-GENCHEM 58 of 60

Weston CQC ID
Weston_20241204_M

# Chain of Custody Record/Lab Work Request

Page 1 of 1



Client:	Weston S	Solutions, Inc	<b>.</b>								
Project Manager:	David Sembrot										
Street Address:	1400 Weston Way	West Chester									
Phone:	610-314-5456	ST, ZIP:	PA, 19038								
e-mail:	david.sembrot@v	vestonsol	utions.com								
Sampled By:	Cheyenn	e Harringtor	)								

Lab Use Only		
Temperature of cooler when received (°C)		
COC Tape was present and unbroken on outer package?	Υ	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

									- Skinting thros
Project Name:	Fort	Meade	RI	Project F	OC:	Nathan	Fretz	A	Matrix Codes
PO Number	0	111169		Phone	):	484-524	-5665	SB-	Soil
W.Q.#:				POC e-mail:	nathan.t	retz@westons	olutions.com	SE-	Sediment
Lab:	CHEMTECH	H-ALS I	Vliddletown	Lab PO	C:	Jordan H	ledvat	SO-	Solid
TAT (days):		7		Lab Pho	Lab Phone: 908-728-		-3144	SL-	Sludge
Lab Address:		2	84 Sheffield St	reet Mountainside		GW -	Groundwater		
	346	846					W-	Water	
Analyses Requested:		(SW-846 EPA 9034)	active Cyanide SW-846 Chapter 7.3.3.2, EPA 9012B)					0-	Oil
			Reactive Cyanide Chapter 7.3.3.2 9012B)					Α-	Air
		m N-	e Cys					DS-	Drum Solids
		Reactive Chapter 7	Chap					DL -	Drum Liquids
Container Type: (			8 _					L-	EP/TCLP Leachate
			Glass					WI -	Wipe
	Container Size:	8 oz	8 oz					X	Other
	Preservative:	Ice to 0-6	lce to 0-6 dec C					F-	Fish

_							Freservauve.	0-6	dec C			_ [	!_	1 1	F - Fish
#	Sample ID	G/C	Matrix	# Cont	MS/MSD	Date Collected	Time Collected							Spe	ecial instructions/Comments
1	TAPIAL2-IDW-Soil-120424-00-T2	g	DS	1	no	12/4/2024	13:00	х	Х						Expedited TAT
2															
3															
4													$\top$		
5															
6													_		
7															
8															
9										1					
10										1					
11															
12															

	Shipping Airbill Number(s): 7704 9457 4955				2.6 Cooler Number: 21 of 21			
	Relinquished By	Date	Time	Received By	Date	Time		Additional Comments
1.)	Sully	12424	1600	DA	12-5-24	10/0	SAMPLES TO BE ANALYZED BY ALS MIDDLETOWN QSM 6.0 Compliant	
2.)	0			7			Deliverable Requirements: DoD Level IV report, EnviroData EDD, and ERIS-compatible EDD	
3.)								



### Laboratory Certification

	1
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

QA Control Code: A2070148

P5120-GENCHEM 60 of 60