

Cover Page

Order ID : Q1938

Project ID : Stan Hope

Client : Saxton Falls Sand and Gravel Co. Inc.

Lab Sample Number

Q1938-01
Q1938-02
Q1938-03
Q1938-04
Q1938-05
Q1938-06
Q1938-07
Q1938-08

Client Sample Number

LOWER-WALL-PILE-A
LOWER-WALL-PILE-A
LOWER-WALL-PILE-B
LOWER-WALL-PILE-B
LOWER-WALL-PILE-C
LOWER-WALL-PILE-C
LOWER-WALL-PILE-D
LOWER-WALL-PILE-D

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: 5/10/2025

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1938

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: PRATIK PATEL

Date: 05/10/2025

LAB CHRONICLE

OrderID:	Q1938	OrderDate:	5/1/2025 2:05:00 PM
Client:	Saxton Falls Sand and Gravel Co. Inc.	Project:	Stan Hope
Contact:	Rich Schindelar	Location:	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1938-01	LOWER-WALL-PILE-A	SOIL			05/01/25 12:50			05/01/25
			Cyanide	9012B		05/06/25	05/07/25 11:22	
			Hexavalent Chromium	7196A		05/06/25	05/06/25 12:14	
			Trivalent Chromium	6010D			05/09/25 16:57	
Q1938-03	LOWER-WALL-PILE-B	SOIL			05/01/25 13:00			05/01/25
			Cyanide	9012B		05/06/25	05/07/25 11:22	
			Hexavalent Chromium	7196A		05/06/25	05/06/25 12:15	
			Trivalent Chromium	6010D			05/09/25 17:01	
Q1938-05	LOWER-WALL-PILE-C	SOIL			05/01/25 13:12			05/01/25
			Cyanide	9012B		05/06/25	05/07/25 11:22	
			Hexavalent Chromium	7196A		05/06/25	05/06/25 12:16	
			Trivalent Chromium	6010D			05/09/25 17:05	
Q1938-07	LOWER-WALL-PILE-D	SOIL			05/01/25 13:20			05/01/25
			Cyanide	9012B		05/06/25	05/07/25 11:29	
			Hexavalent Chromium	7196A		05/06/25	05/06/25 12:17	

LAB CHRONICLE

Trivalent Chromium

6010D

05/09/25
17:09



SAMPLE DATA

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25 12:50
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-A	SDG No.:	Q1938
Lab Sample ID:	Q1938-01	Matrix:	SOIL
		% Solid:	93.1

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.059	J	1	0.043	0.26	mg/Kg	05/06/25 11:00	05/07/25 11:22	9012B
Hexavalent Chromium	0.073	U	1	0.073	0.42	mg/Kg	05/06/25 09:00	05/06/25 12:14	7196A
Trivalent Chromium	7.96		1	0.54	0.54	mg/Kg		05/09/25 16:57	6010D

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

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25 13:00
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-B	SDG No.:	Q1938
Lab Sample ID:	Q1938-03	Matrix:	SOIL
		% Solid:	96.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.17	J	1	0.043	0.26	mg/Kg	05/06/25 11:00	05/07/25 11:22	9012B
Hexavalent Chromium	0.071	U	1	0.071	0.41	mg/Kg	05/06/25 09:00	05/06/25 12:15	7196A
Trivalent Chromium	5.52		1	0.52	0.52	mg/Kg		05/09/25 17:01	6010D

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

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25 13:12
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-C	SDG No.:	Q1938
Lab Sample ID:	Q1938-05	Matrix:	SOIL
		% Solid:	96.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.11	J	1	0.042	0.25	mg/Kg	05/06/25 11:00	05/07/25 11:22	9012B
Hexavalent Chromium	0.070	U	1	0.070	0.40	mg/Kg	05/06/25 09:00	05/06/25 12:16	7196A
Trivalent Chromium	8.93		1	0.52	0.52	mg/Kg		05/09/25 17:05	6010D

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

Report of Analysis

Client:	Saxton Falls Sand and Gravel Co. Inc.	Date Collected:	05/01/25 13:20
Project:	Stan Hope	Date Received:	05/01/25
Client Sample ID:	LOWER-WALL-PILE-D	SDG No.:	Q1938
Lab Sample ID:	Q1938-07	Matrix:	SOIL
		% Solid:	95

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	0.074	J	1	0.044	0.26	mg/Kg	05/06/25 11:00	05/07/25 11:29	9012B
Hexavalent Chromium	0.073	U	1	0.073	0.42	mg/Kg	05/06/25 09:00	05/06/25 12:17	7196A
Trivalent Chromium	4.19		1	0.53	0.53	mg/Kg		05/09/25 17:09	6010D

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



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

Initial and Continuing Calibration Verification

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135680

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.493	0.5	99	90-110	05/06/2025
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.490	0.5	98	90-110	05/06/2025
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	05/06/2025
Sample ID: CCV3 Hexavalent Chromium	mg/L	0.497	0.5	99	90-110	05/06/2025

Initial and Continuing Calibration Verification

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135693

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Cyanide	mg/L	0.099	0.099	100	90-110	05/07/2025
Sample ID: CCV1 Cyanide	mg/L	0.25	0.25	100	90-110	05/07/2025
Sample ID: CCV2 Cyanide	mg/L	0.24	0.25	96	90-110	05/07/2025
Sample ID: CCV3 Cyanide	mg/L	0.25	0.25	100	90-110	05/07/2025
Sample ID: CCV4 Cyanide	mg/L	0.24	0.25	96	90-110	05/07/2025
Sample ID: CCV5 Cyanide	mg/L	0.25	0.25	100	90-110	05/07/2025

Initial and Continuing Calibration Verification

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135693

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
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Initial and Continuing Calibration Blank Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135680

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/06/2025
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/06/2025
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/06/2025
Sample ID: CCB3 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0029	0.01	05/06/2025

Initial and Continuing Calibration Blank Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135693

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Cyanide	mg/L	0.0014	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB1 Cyanide	mg/L	0.0014	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB2 Cyanide	mg/L	0.0012	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB3 Cyanide	mg/L	0.0016	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB4 Cyanide	mg/L	0.0012	0.0025	J	0.00096	0.005	05/07/2025
Sample ID: CCB5 Cyanide	mg/L	0.0016	0.0025	J	0.00096	0.005	05/07/2025

Initial and Continuing Calibration Blank Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

RunNo.: LB135693

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
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Preparation Blank Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: PB167869BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.07	0.4	05/06/2025
Sample ID: PB167873BL							
Cyanide	mg/Kg	0.064	0.1250	J	0.042	0.25	05/07/2025

Matrix Spike Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMS	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/Kg	75-125	2.20		0.074	J	2.1	1	101		05/07/2025

Matrix Spike Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMS	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1320		0.073	U	1350	40	98		05/06/2025

Matrix Spike Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMS	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	39.9		0.073	U	42.1	2	95		05/06/2025

Matrix Spike Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMSD	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/Kg	75-125	2.10		0.074	J	2.1	1	96		05/07/2025

Matrix Spike Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMS	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	33.4		0.073	U	42.1	2	79		05/06/2025

Duplicate Sample Summary

Client: Saxton Falls Sand and Gravel Co. Inc.	SDG No.: Q1938
Project: Stan Hope	Sample ID: Q1938-07
Client ID: LOWER-WALL-PILE-DDUP	Percent Solids for Spike Sample: 95

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.073	U	0.073	U	1	0		05/06/2025
Cyanide	mg/Kg	+/-20	0.074	J	0.082	J	1	10		05/07/2025

Duplicate Sample Summary

Client:	Saxton Falls Sand and Gravel Co. Inc.	SDG No.:	Q1938
Project:	Stan Hope	Sample ID:	Q1938-07
Client ID:	LOWER-WALL-PILE-DMSD	Percent Solids for Spike Sample:	95

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/Kg	+/-20	2.20		2.10		1	5		05/07/2025

Laboratory Control Sample Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

Run No.: LB135680

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167869BS							
Hexavalent Chromium	mg/Kg	20	19.8		99	1	84-110	05/06/2025

Laboratory Control Sample Summary

Client: Saxton Falls Sand and Gravel Co. Inc.

SDG No.: Q1938

Project: Stan Hope

Run No.: LB135693

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB167873BS							
Cyanide	mg/Kg	5	4.80		96	1	85-115	05/07/2025



RAW DATA

Analytical Summary Report

Analysis Method: 7196A

ANALYST: rubina

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB135680

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP112959
5N sulfuric acid	WP112831
HNO3 Hex-Chrome, 5M	WP112830
Hexchrome Cleaning Solution	WP111249

Intercept: 0.0017

Slope: 0.7673

Regression: 0.99999

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HNO3	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.30	1.96	0.000	0.000	0.000	-0.00		05/06/2025	12:00
2	CAL2	0.01	1	100	100	7.38	2.01	0.000	0.009	0.009	0.009	-10	05/06/2025	12:01
3	CAL3	0.025	1	100	100	7.42	1.92	0.000	0.021	0.021	0.025	0	05/06/2025	12:02
4	CAL4	0.05	1	100	100	7.48	1.98	0.000	0.040	0.040	0.049	-2	05/06/2025	12:03
5	CAL5	0.1	1	100	100	7.39	1.99	0.000	0.081	0.081	0.103	3	05/06/2025	12:04
6	CAL6	0.5	1	100	100	7.44	1.90	0.000	0.385	0.385	0.499	-0.2	05/06/2025	12:05
7	CAL7	1	1	100	100	7.40	1.88	0.000	0.769	0.769	1	0	05/06/2025	12:06

Analytical Summary Report

Analysis Method: 7196A

ANALYST:rubina

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB135680

pH Meter ID:WC pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100	7.44	2.00	0.000	0.380	0.380	0.493	05/06/2025	12:07
2	ICB		1	100	100	7.27	1.88	0.000	0.001	0.001	-0.001	05/06/2025	12:08
3	CCV1	0.5	1	100	100	7.47	1.91	0.000	0.378	0.378	0.490	05/06/2025	12:09
4	CCB1		1	100	100	7.24	1.82	0.000	0.001	0.001	-0.001	05/06/2025	12:10
5	RL Check	0.01	1	100	100	7.40	1.95	0.000	0.010	0.010	0.011	05/06/2025	12:11
6	PB167869BL		1	2.50	100	7.35	1.77	0.000	0.000	0.000	-0.002	05/06/2025	12:12
7	PB167869BS	20	1	2.50	100	7.49	1.88	0.000	0.382	0.382	0.496	05/06/2025	12:13
8	Q1938-01		1	2.57	100	7.39	2.06	0.035	0.036	0.001	-0.001	05/06/2025	12:14
9	Q1938-03		1	2.55	100	7.59	2.17	0.025	0.025	0.000	-0.002	05/06/2025	12:15
10	Q1938-05		1	2.58	100	7.60	2.03	0.025	0.026	0.001	-0.001	05/06/2025	12:16
11	Q1938-07		1	2.53	100	7.60	2.15	0.004	0.004	0.000	-0.002	05/06/2025	12:17
12	Q1938-07DU		1	2.53	100	7.61	2.10	0.004	0.004	0.000	-0.002	05/06/2025	12:18
13	Q1938-07MS	40	2	2.52	100	7.56	2.08	0.000	0.309	0.309	0.400	05/06/2025	12:19
14	Q1938-07MS	1284	40	2.53	100	7.65	2.10	0.000	0.612	0.612	0.795	05/06/2025	12:20
15	Q1938-07MS	40	2	2.53	100	7.69	2.20	0.000	0.370	0.370	0.480	05/06/2025	12:21
16	CCV2	0.5	1	100	100	7.53	1.85	0.000	0.383	0.383	0.497	05/06/2025	12:22
17	CCB2		1	100	100	7.39	1.90	0.000	0.000	0.000	-0.002	05/06/2025	12:23
18	Q1947-01		1	2.51	100	7.60	2.20	0.020	0.020	0.000	-0.002	05/06/2025	12:24
19	Q1947-05		1	2.58	100	7.52	2.29	0.002	0.002	0.000	-0.002	05/06/2025	12:25
20	Q1951-01		1	2.55	100	7.42	2.11	0.020	0.020	0.000	-0.002	05/06/2025	12:26
21	Q1960-02		1	2.52	100	7.74	2.06	0.028	0.033	0.005	0.004	05/06/2025	12:27
22	Q1961-01		1	2.52	100	7.33	2.17	0.004	0.005	0.001	-0.001	05/06/2025	12:28
23	CCV3	0.5	1	100	100	7.36	1.99	0.000	0.383	0.383	0.497	05/06/2025	12:29
24	CCB3		1	100	100	7.24	1.73	0.000	0.001	0.001	-0.001	05/06/2025	12:30

L61356

Test results Aquakem 7.2AQ1 Page:

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

5/7/2025 12:38 Reviewed by : RM Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	98.999	0.0	0.065	
ICB1	1.366	0.0	0.001	
CCV1	245.155	0.0	0.161	
CCB1	1.415	0.0	0.001	
PB167873BL	1.277	0.0	0.001	
PB167873BS	95.439	0.0	0.063	
LOWPB167873	10.055	0.0	0.007	
HIGHPB167873	489.793	0.0	0.320	
Q1936-01	4.691	0.0	0.003	
Q1936-03	2.081	0.0	0.002	
Q1936-07	2.027	0.0	0.002	
Q1937-01	1.395	0.0	0.001	
Q1937-03	1.254	0.0	0.001	
Q1936-05	1.159	0.0	0.001	
CCV2	241.524	0.0	0.158	
CCB2	1.206	0.0	0.001	
Q1937-05	1.512	0.0	0.001	
Q1937-07	1.606	0.0	0.001	
Q1937-09	1.345	0.0	0.001	
Q1937-11	1.484	0.0	0.001	
Q1938-01	1.147	0.0	0.001	
Q1938-03	3.397	0.0	0.003	
Q1938-05	2.140	0.0	0.002	
Q1938-07	1.418	0.0	0.001	
Q1938-07DUP	1.574	0.0	0.001	
Q1938-07MS	42.495	0.0	0.028	
CCV3	249.805	0.0	0.164	
CCB3	1.592	0.0	0.001	
Q1938-07MSD	41.652	0.0	0.028	
Q1872-03	1053.849	0.0	0.689	Test limit high
CCV4	244.653	0.0	0.160	
CCB4	1.208	0.0	0.001	
Q1872-03DLX5	224.652	0.0	0.147	
CCV5	249.524	0.0	0.163	
CCB5	1.572	0.0	0.001	

100% (90-110)
97% (90-110) 05/07/2025
RM

N 35
Mean 95.013
SD 203.6856
CV% 214.38

Aquakem v. 7.2AQ1

Results from time period:

Wed May 07 09:20:29 2025

Wed May 07 12:13:55 2025

Sample Id	Sam/Ctr/c/	Test short name	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	1.024	µg/l	5/7/2025 10:11:56	
5.0PPBCN	A	Total CN	P	5.4111	µg/l	5/7/2025 10:11:57	
10PPBCN	A	Total CN	P	10.9055	µg/l	5/7/2025 10:11:58	
50PPBCN	A	Total CN	P	47.916	µg/l	5/7/2025 10:11:59	
100PPBCN	A	Total CN	P	100.5029	µg/l	5/7/2025 10:12:00	
250PPBCN	A	Total CN	P	248.3098	µg/l	5/7/2025 10:12:01	
500PPBCN	A	Total CN	P	500.9307	µg/l	5/7/2025 10:12:02	
ICV1	S	Total CN	P	98.9986	µg/l	5/7/2025 11:02:11	
ICB1	S	Total CN	P	1.3662	µg/l	5/7/2025 11:02:12	
CCV1	S	Total CN	P	245.1545	µg/l	5/7/2025 11:02:14	
CCB1	S	Total CN	P	1.415	µg/l	5/7/2025 11:02:17	
PB167873BL	S	Total CN	P	1.2768	µg/l	5/7/2025 11:02:18	
PB167873BS	S	Total CN	P	95.4394	µg/l	5/7/2025 11:09:45	
LOWPB167873	S	Total CN	P	10.0553	µg/l	5/7/2025 11:09:48	
HIGHPB167873	S	Total CN	P	489.7934	µg/l	5/7/2025 11:09:51	
Q1936-01	S	Total CN	P	4.6908	µg/l	5/7/2025 11:09:52	
Q1936-03	S	Total CN	P	2.0812	µg/l	5/7/2025 11:09:53	
Q1936-07	S	Total CN	P	2.0272	µg/l	5/7/2025 11:09:55	
Q1937-01	S	Total CN	P	1.3954	µg/l	5/7/2025 11:17:19	
Q1937-03	S	Total CN	P	1.2537	µg/l	5/7/2025 11:17:20	
Q1936-05	S	Total CN	P	1.1592	µg/l	5/7/2025 11:17:21	
CCV2	S	Total CN	P	241.5237	µg/l	5/7/2025 11:17:24	
CCB2	S	Total CN	P	1.2063	µg/l	5/7/2025 11:17:26	
Q1937-05	S	Total CN	P	1.5117	µg/l	5/7/2025 11:17:27	
Q1937-07	S	Total CN	P	1.6058	µg/l	5/7/2025 11:17:28	
Q1937-09	S	Total CN	P	1.3449	µg/l	5/7/2025 11:17:29	
Q1937-11	S	Total CN	P	1.4839	µg/l	5/7/2025 11:22:07	
Q1938-01	S	Total CN	P	1.1473	µg/l	5/7/2025 11:22:08	
Q1938-03	S	Total CN	P	3.3973	µg/l	5/7/2025 11:22:09	
Q1938-05	S	Total CN	P	2.1398	µg/l	5/7/2025 11:22:10	
Q1938-07	S	Total CN	P	1.4185	µg/l	5/7/2025 11:29:42	
Q1938-07DUP	S	Total CN	P	1.5738	µg/l	5/7/2025 11:29:43	
Q1938-07MS	S	Total CN	P	42.4946	µg/l	5/7/2025 11:29:46	
CCV3	S	Total CN	P	249.8048	µg/l	5/7/2025 11:29:48	
CCB3	S	Total CN	P	1.5922	µg/l	5/7/2025 11:29:50	
Q1938-07MSD	S	Total CN	P	41.6518	µg/l	5/7/2025 11:29:52	
Q1872-03	S	Total CN	P	1053.8491	µg/l	5/7/2025 11:37:17	
CCV4	S	Total CN	P	244.6532	µg/l	5/7/2025 11:44:56	
CCB4	S	Total CN	P	1.2076	µg/l	5/7/2025 11:44:59	
Q1872-03DLX5	S	Total CN	P	224.6522	µg/l	5/7/2025 12:09:08	
CCV5	S	Total CN	P	249.5241	µg/l	5/7/2025 12:13:52	
CCB5	S	Total CN	P	1.5718	µg/l	5/7/2025 12:13:55	

Calibration results

Aquakem 7.2AQ1

Page: 1

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

Reviewed by : RM

Instrument ID : Konelab

5/7/2025 10:12

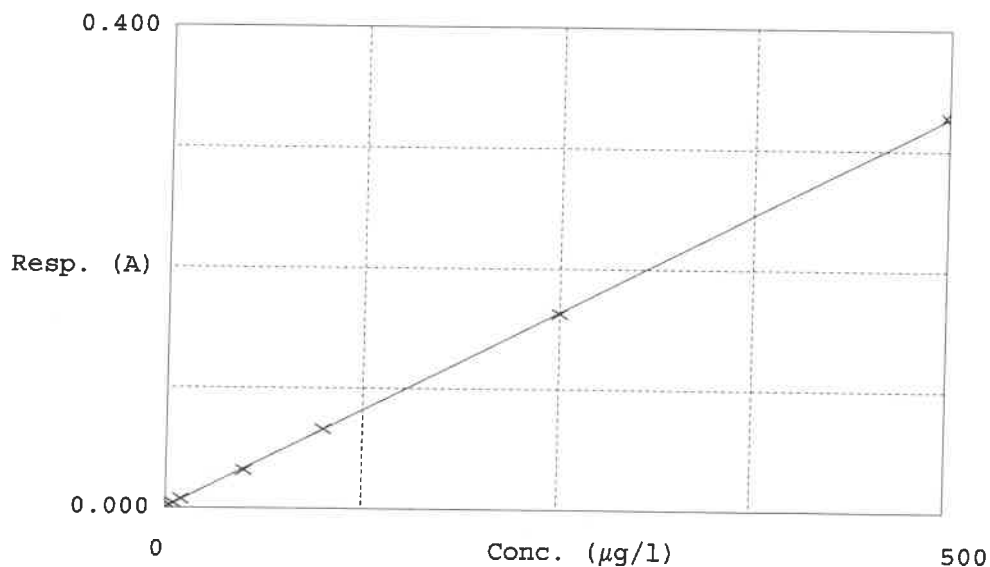
Test Total CN

Accepted 5/7/2025 10:12

Factor 1530
Bias 0

Coeff. of det. 0.999950

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.0PPBCN	0.001	1.0240	0.0000	8.2
2	5.0PPBCN	0.004	5.4111	5.0000	9.1
3	10PPBCN	0.007	10.9055	10.0000	-4.2
4	50PPBCN	0.032	47.9160	50.0000	0.5
5	100PPBCN	0.066	100.5029	100.0000	-0.7
6	250PPBCN	0.163	248.3098	250.0000	0.2
7	500PPBCN	0.328	500.9307	500.0000	

05/07/2025
RM

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

Block ID : WC S-1, WC S-2

Weigh By : RM

Start Digest Date: 05/06/2025 Time : 09:00 Temp : 90 °C

End Digest Date: 05/06/2025 Time : 10:00 Temp : 93 °C

11 befeh
05/06/2025 10:20 90°C RM
05/06/2025 11:20 95°C

Digestion tube ID : M6054

Block Thermometer ID : WC-Block#1

Filter paper ID : 400213

Prep Technician Signature: *RM*

pH Meter ID : WC pH meter-1

Supervisor Signature: *12*

Standard Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP111315
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP111315
LCSS	1.0ML	WP111316
PBS003	50.ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3152
PHOSPHATE BUFFER	0.5ML	WP112903
HEX. DIGESTION SOLN.	50.0ML	WP112686
5M HNO3	5-7ML	WP112830
5N H2SO4	1-3ML	WP112831
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	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP112958
CAL3	CAL3	0.5ML	WP112958
CAL4	CAL4	1ML	WP112958
CAL5	CAL5	0.2ML	WP111315
CAL6	CAL6	1ML	WP111315
CAL7	CAL7	2.0ML	WP111315
ICV	ICV	1ML	WP111316
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP111315
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments:

05/06/2025 RM

N/A

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167869BL	PBS869	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB167869BS	LCS869	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-01	LOWER-WALL-PILE-A	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-03	LOWER-WALL-PILE-B	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-05	LOWER-WALL-PILE-C	2.58	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07	LOWER-WALL-PILE-D	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07DUP	LOWER-WALL-PILE-DDUP	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07MSPre	LOWER-WALL-PILE-DMSPRE	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07MS2Ins	LOWER-WALL-PILE-DMS2INS	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07MS3Post	LOWER-WALL-PILE-DMS3POST	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1947-01	MH-P	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1947-05	MH-O	2.58	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1951-01	MH-KK	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1960-02	72-11933	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
Q1961-01	EO-01-050225	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A

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

SDG No : N/A

Start Digest Date: 05/06/2025 Time : 11:00 Temp : 124 °C

Matrix : SOIL

End Digest Date: 05/06/2025 Time : 12:30 Temp : 126 °C

Pipette ID : WC

if belch
05/06/2025 13:00 124°C
05/06/2025 14:30 126°C

Balance ID : WC SC-7

Hood ID : HOOD#1

Digestion tube ID : M5595

Block Thermometer ID : WC CYANIDE

Block ID : MC-1,MC-2

Filter paper ID : N/A

Prep Technician Signature: *[Signature]*

Weigh By : JP

pH Meter ID : N/A

Supervisor Signature: *12*

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP111296
MS/MSD SPIKE SOL.	0.40ML	WP111295
PBS003	50.0ML	W3112
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
50% v/v H2SO4	5.0ML	WP112826
51% w/v MgCL2	2.0ML	WP112827
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	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3012
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	N/A	N/A
HIGHSTD	HIGHSTD	5.0ML	WP111295
LOWSTD	LOWSTD	0.1ML	WP111295

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
05/06/2025 14:50	<i>JP / LOC</i>	<i>RM / WCL</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
PB167873BL	PBS873	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB167873BS	LCS873	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1872-03	HW0425-PT-CN-SOIL	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1936-01	SMALL-PILE-A	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1936-03	SMALL-PILE-B	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1936-05	SMALL-PILE-C	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1936-07	SMALL-PILE-D	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-01	LARGE-PILE-A	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-03	LARGE-PILE-B	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-05	LARGE-PILE-C	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-07	LARGE-PILE-D	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-09	LARGE-PILE-E	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1937-11	LARGE-PILE-F	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-01	LOWER-WALL-PILE-A	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-03	LOWER-WALL-PILE-B	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-05	LOWER-WALL-PILE-C	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07	LOWER-WALL-PILE-D	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07DUP	LOWER-WALL-PILE-DDUP	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07MS	LOWER-WALL-PILE-DMS	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
Q1938-07MSD	LOWER-WALL-PILE-DMSD	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB135680

Review By	rubina	Review On	5/6/2025 1:03:16 PM
Supervise By	Iwona	Supervise On	5/6/2025 1:24:40 PM
SubDirectory	LB135680	Test	Hexavalent Chromium
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	WP112959,WP112831,WP112830,WP111249		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	05/06/25 12:00		rubina	OK
2	CAL2	CAL2	CAL	05/06/25 12:01		rubina	OK
3	CAL3	CAL3	CAL	05/06/25 12:02		rubina	OK
4	CAL4	CAL4	CAL	05/06/25 12:03		rubina	OK
5	CAL5	CAL5	CAL	05/06/25 12:04		rubina	OK
6	CAL6	CAL6	CAL	05/06/25 12:05		rubina	OK
7	CAL7	CAL7	CAL	05/06/25 12:06		rubina	OK
8	ICV	ICV	ICV	05/06/25 12:07		rubina	OK
9	ICB	ICB	ICB	05/06/25 12:08		rubina	OK
10	CCV1	CCV1	CCV	05/06/25 12:09		rubina	OK
11	CCB1	CCB1	CCB	05/06/25 12:10		rubina	OK
12	RL Check	RL Check	SAM	05/06/25 12:11		rubina	OK
13	PB167869BL	PB167869BL	MB	05/06/25 12:12		rubina	OK
14	PB167869BS	PB167869BS	LCS	05/06/25 12:13		rubina	OK
15	Q1938-01	LOWER-WALL-PILE-I	SAM	05/06/25 12:14		rubina	OK
16	Q1938-03	LOWER-WALL-PILE-I	SAM	05/06/25 12:15		rubina	OK
17	Q1938-05	LOWER-WALL-PILE-I	SAM	05/06/25 12:16		rubina	OK
18	Q1938-07	LOWER-WALL-PILE-I	SAM	05/06/25 12:17		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135680

Review By	rubina	Review On	5/6/2025 1:03:16 PM
Supervise By	Iwona	Supervise On	5/6/2025 1:24:40 PM
SubDirectory	LB135680	Test	Hexavalent Chromium
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	WP112959,WP112831,WP112830,WP111249		

19	Q1938-07DUP	LOWER-WALL-PILE-I	DUP	05/06/25 12:18		rubina	OK
20	Q1938-07MSPre	LOWER-WALL-PILE-I	MS	05/06/25 12:19		rubina	OK
21	Q1938-07MS2Ins	LOWER-WALL-PILE-I	MS	05/06/25 12:20		rubina	OK
22	Q1938-07MS3Post	LOWER-WALL-PILE-I	MS	05/06/25 12:21		rubina	OK
23	CCV2	CCV2	CCV	05/06/25 12:22		rubina	OK
24	CCB2	CCB2	CCB	05/06/25 12:23		rubina	OK
25	Q1947-01	MH-P	SAM	05/06/25 12:24		rubina	OK
26	Q1947-05	MH-O	SAM	05/06/25 12:25		rubina	OK
27	Q1951-01	MH-KK	SAM	05/06/25 12:26		rubina	OK
28	Q1960-02	72-11933	SAM	05/06/25 12:27		rubina	OK
29	Q1961-01	EO-01-050525	SAM	05/06/25 12:28		rubina	OK
30	CCV3	CCV3	CCV	05/06/25 12:29		rubina	OK
31	CCB3	CCB3	CCB	05/06/25 12:30		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135693

Review By	rubina	Review On	5/8/2025 10:21:54 AM
Supervise By		Supervise On	
SubDirectory	LB135693	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983		
ICV Standard	W3012		
CCV Standard	WP112978		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111296		
Chk Standard	WP112643,WP112900,WP112985		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	05/07/25 10:11		rubina	OK
2	5.0PPBCN	5.0PPBCN	CAL2	05/07/25 10:11		rubina	OK
3	10PPBCN	10PPBCN	CAL3	05/07/25 10:11		rubina	OK
4	50PPBCN	50PPBCN	CAL4	05/07/25 10:11		rubina	OK
5	100PPBCN	100PPBCN	CAL5	05/07/25 10:12		rubina	OK
6	250PPBCN	250PPBCN	CAL6	05/07/25 10:12		rubina	OK
7	500PPBCN	500PPBCN	CAL7	05/07/25 10:12		rubina	OK
8	ICV1	ICV1	ICV	05/07/25 11:02		rubina	OK
9	ICB1	ICB1	ICB	05/07/25 11:02		rubina	OK
10	CCV1	CCV1	CCV	05/07/25 11:02		rubina	OK
11	CCB1	CCB1	CCB	05/07/25 11:02		rubina	OK
12	PB167873BL	PB167873BL	MB	05/07/25 11:02		rubina	OK
13	PB167873BS	PB167873BS	LCS	05/07/25 11:09		rubina	OK
14	LOWPB167873	LOWPB167873	SAM	05/07/25 11:09		rubina	OK
15	HIGHPB167873	HIGHPB167873	SAM	05/07/25 11:09		rubina	OK
16	Q1936-01	SMALL-PILE-A	SAM	05/07/25 11:09		rubina	OK
17	Q1936-03	SMALL-PILE-B	SAM	05/07/25 11:09		rubina	OK
18	Q1936-07	SMALL-PILE-D	SAM	05/07/25 11:09		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135693

Review By	rubina	Review On	5/8/2025 10:21:54 AM
Supervise By		Supervise On	
SubDirectory	LB135693	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983		
ICV Standard	W3012		
CCV Standard	WP112978		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111296		
Chk Standard	WP112643,WP112900,WP112985		

19	Q1937-01	LARGE-PILE-A	SAM	05/07/25 11:17		rubina	OK
20	Q1937-03	LARGE-PILE-B	SAM	05/07/25 11:17		rubina	OK
21	Q1936-05	SMALL-PILE-C	SAM	05/07/25 11:17		rubina	OK
22	CCV2	CCV2	CCV	05/07/25 11:17		rubina	OK
23	CCB2	CCB2	CCB	05/07/25 11:17		rubina	OK
24	Q1937-05	LARGE-PILE-C	SAM	05/07/25 11:17		rubina	OK
25	Q1937-07	LARGE-PILE-D	SAM	05/07/25 11:17		rubina	OK
26	Q1937-09	LARGE-PILE-E	SAM	05/07/25 11:17		rubina	OK
27	Q1937-11	LARGE-PILE-F	SAM	05/07/25 11:22		rubina	OK
28	Q1938-01	LOWER-WALL-PILE-I	SAM	05/07/25 11:22		rubina	OK
29	Q1938-03	LOWER-WALL-PILE-I	SAM	05/07/25 11:22		rubina	OK
30	Q1938-05	LOWER-WALL-PILE-I	SAM	05/07/25 11:22		rubina	OK
31	Q1938-07	LOWER-WALL-PILE-I	SAM	05/07/25 11:29		rubina	OK
32	Q1938-07DUP	LOWER-WALL-PILE-I	DUP	05/07/25 11:29		rubina	OK
33	Q1938-07MS	LOWER-WALL-PILE-I	MS	05/07/25 11:29		rubina	OK
34	CCV3	CCV3	CCV	05/07/25 11:29		rubina	OK
35	CCB3	CCB3	CCB	05/07/25 11:29		rubina	OK
36	Q1938-07MSD	LOWER-WALL-PILE-I	MSD	05/07/25 11:29		rubina	OK
37	Q1872-03	HW0425-PT-CN-SOIL	SAM	05/07/25 11:37	CN is high	rubina	Dilution
38	CCV4	CCV4	CCV	05/07/25 11:44		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB135693

Review By	rubina	Review On	5/8/2025 10:21:54 AM
Supervise By		Supervise On	
SubDirectory	LB135693	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983		
ICV Standard	W3012		
CCV Standard	WP112978		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111296		
Chk Standard	WP112643,WP112900,WP112985		

39	CCB4	CCB4	CCB	05/07/25 11:44		rubina	OK
40	Q1872-03DL	HW0425-PT-CN-SOIL	SAM	05/07/25 12:09	5X for CN	rubina	Confirms
41	CCV5	CCV5	CCV	05/07/25 12:13		rubina	OK
42	CCB5	CCB5	CCB	05/07/25 12:13		rubina	OK

Instrument ID: GRAVIMETRIC

Daily Analysis Runlog For Sequence/QC Batch ID # LB135712

Review By	JSathvara	Review On	5/10/2025 5:33:46 AM
Supervise By	Pradip	Supervise On	5/10/2025 5:41:18 AM
SubDirectory	LB135712	Test	Trivalent Chromium
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	N/A		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	Q1937-01	LARGE-PILE-A	SAM	05/09/25 16:23		JSathvara	OK
2	Q1937-03	LARGE-PILE-B	SAM	05/09/25 16:28		JSathvara	OK
3	Q1937-05	LARGE-PILE-C	SAM	05/09/25 16:32		JSathvara	OK
4	Q1937-07	LARGE-PILE-D	SAM	05/09/25 16:36		JSathvara	OK
5	Q1937-09	LARGE-PILE-E	SAM	05/09/25 16:49		JSathvara	OK
6	Q1937-11	LARGE-PILE-F	SAM	05/09/25 16:53		JSathvara	OK
7	Q1938-01	LOWER-WALL-PILE-A	SAM	05/09/25 16:57		JSathvara	OK
8	Q1938-03	LOWER-WALL-PILE-B	SAM	05/09/25 17:01		JSathvara	OK
9	Q1938-05	LOWER-WALL-PILE-C	SAM	05/09/25 17:05		JSathvara	OK
10	Q1938-07	LOWER-WALL-PILE-D	SAM	05/09/25 17:09		JSathvara	OK

Prep Standard - Chemical Standard Summary

Order ID : Q1938

Test : Cyanide,Hexavalent Chromium,Percent Solids,Trivalent Chromium

Prepbatch ID : PB167869,PB167873,

Sequence ID/Qc Batch ID: LB135680,LB135693,LB135712,

Standard ID :

WP111249,WP111294,WP111295,WP111296,WP111315,WP111316,WP112643,WP112686,WP112826,WP112827,WP112830,WP112831,WP112900,WP112903,WP112959,WP112976,WP112977,WP112978,WP112979,WP112980,WP112981,WP112982,WP112983,WP112985,

Chemical ID :

E3932,M6041,M6121,M6126,M6151,M6158,W2202,W2651,W2652,W2668,W2979,W3012,W3019,W 3112,W3113,W3138,W3139,W3152,W3154,W3163,W3168,W3203,W3206,

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3354	Hexchrome Cleaning Solution	WP111249	12/30/2024	05/13/2025	Rubina Mughal	None	None	Iwona Zarych
								01/02/2025

FROM 182.00000ml of M6121 + 727.00000ml of W3112 + 91.00000ml of M6126 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
11	Sodium hydroxide absorbing solution 0.25 N	WP111294	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych
								01/07/2025

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

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3371	Cyanide LCS Spike Solution, 5PPM	WP111296	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/07/2025
<u>FROM</u> 1.00000ml of W3138 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP111315	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCS-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP111316	01/09/2025	07/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 01/09/2025
<u>FROM</u>	0.14140gram of W2652 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml							



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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
148	hexchrome digestion fluid	WP112686	04/14/2025	05/14/2025	Rubina Mughal	WETCHEM_SCALE_8 (WCS-7)	None	Iwona Zarych 04/14/2025
<u>FROM</u> 120.00000gram of W3163 + 4.00000L of W3112 + 80.00000gram of W3113 = Final Quantity: 4000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1714	Sulfuric Acid, 50% (v/v)	WP112826	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 1000.00000ml of M6041 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	WP112827	04/25/2025	10/25/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	None	Iwona Zarych
								04/25/2025

FROM 500.00000ml of W3112 + 510.00000gram of W3152 = Final Quantity: 1000.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1836	HNO3 Hex-Chrome, 5M	WP112830	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 320.00000ml of M6158 + 680.00000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
126	5N sulfuric acid	WP112831	04/25/2025	10/25/2025	Rubina Mughal	None	None	Iwona Zarych
								04/25/2025

FROM 140.00000ml of M6041 + 860.00000ml of W3112 = Final Quantity: 1.000 L



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
607	PYRIDINE-BARBITURIC ACID	WP112900	05/01/2025	08/18/2025	Rubina Mughal	WETCHEM_S CALE_8 (WC SC-7)	Glass Pipette-A	Iwona Zarych 05/01/2025
<u>FROM</u> 145.00000ml of W3112 + 15.00000gram of W3203 + 15.00000ml of M6151 + 75.00000ml of W3019 = Final Quantity: 250.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
190	HEX CHROME PHOSPHATE BUFFER	WP112903	05/01/2025	11/01/2025	Rubina Mughal	WETCHEM_SCALE_8 (WC SC-7)	None	Iwona Zarych 05/01/2025
<u>FROM</u> 0.84500L of W3112 + 68.04000gram of W3206 + 87.09000gram of W3168 = Final Quantity: 1.000 L								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
114	hexavalent chromium color reagent	WP112959	05/06/2025	05/13/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 05/06/2025
<u>FROM</u> 0.25000gram of W2979 + 50.00000ml of E3932 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3456	Cyanide Intermediate Working Std, 5PPM	WP112976	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u>	0.25000ml of W3154 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
4	Calibration standard 500 ppb	WP112977	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u>	45.00000ml of WP111294 + 5.00000ml of WP112976 = Final Quantity: 50.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3761	Calibration-CCV CN Standard 250 ppb	WP112978	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u> 2.50000ml of WP112976 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
6	Calibration Standard 100 ppb	WP112979	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u>	1.00000ml of WP112976 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
7	Calibration Standard 50 ppb	WP112980	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
FROM 0.50000ml of WP112976 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
8	Calibration Standard 10 ppb	WP112981	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3	Iwona Zarych
(WC) FROM 1.00000ml of WP112977 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
9	Calibration Standard 5 ppb	WP112982	05/07/2025	05/08/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 05/07/2025
<u>FROM</u>	0.50000ml of WP112977 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml							

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
167	0 ppb CN calibration std	WP112983	05/07/2025	05/08/2025	Rubina Mughal	None	None	Iwona Zarych
								05/07/2025

FROM 50.00000ml of WP11294 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1582	Chloramine T solution, 0.014M	WP112985	05/07/2025	05/08/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	Glass Pipette-A	Iwona Zarych
								05/07/2025

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3932

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

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	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA14125-36 / LEAD (II) CHROMATE, ACS, 500G	U19B018	01/23/2027	01/23/2017 / apatel	01/23/2017 / apatel	W2202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA13450-36 / Potassium Dichromate, 500g(NEW)	T15F019	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2651

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYST, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	31390 / 1,5-Diphenylcarbazide	MKCR6636	12/09/2027	12/09/2022 / lwona	12/09/2022 / lwona	W2979

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / lwona	02/20/2020 / lwona	W3012

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 / lwona	04/03/2023 / lwona	W3019

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 / lwona	07/03/2024 / lwona	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 / lwona	07/08/2024 / lwona	W3113

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Magnesium Chloride Hexahydrate ACS 10KG	002126-2019-201	11/25/2029	11/25/2024 / lwona	11/25/2024 / lwona	W3152

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	24E3156178	09/30/2027	12/10/2024 / lwona	12/10/2024 / lwona	W3163

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3252-1 / POTAS PHOSPHATE, DIBASIC PWD, ACS, 500G	24H0856239	04/19/2028	01/03/2025 / lwona	01/03/2025 / lwona	W3168

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	WXBFB3271V	05/16/2029	04/21/2025 / lwona	04/21/2025 / lwona	W3203

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYST, ACS, 500G	MKCX1379	01/31/2029	04/29/2025 / lwona	04/29/2025 / lwona	W3206

Certificate of analysis

Product No. 14125
Product: Lead(II) chromate, ACS, 98%
Lot No.: U19B018

Test	Limits	Results
Assay	98.0 % min	99.3 %
Soluble matter	0.15 % max	< 0.02 %
Carbon compounds	0.01 % max	< 0.01 %

Traceable to NIST? Yes

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ThermoFisher
S C I E N T I F I C

Product No.: 13450
Product: Potassium dichromate, ACS, 99.0% min
Lot No.: T15F019

Test	Limits	Results
Appearance	Orange-red crystals	Orange-red crystals
Identification	To Pass	Passes
Purity	99.0 % min	99.67 %
Insoluble matter	0.005 % max	0.004 %
Loss on drying	0.05 % max	0.03 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	< 0.001 %
Calcium	0.003 % max	0.0012 %
Sodium	0.02 % max	0.0047 %

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This is to certify that units of the lot number above were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The above information is the actual analytical results obtained.

W3019
rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside 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:

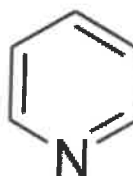
C₅H₅N

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

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.





Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange-red crystals
ASSAY	%	>= 99	99.2
CALCIUM	%	<= 0.003	<0.003
CHLORIDE	%	<= 0.001	<0.001
LOSS ON DRYING @ 105 C	%	<= 0.05	<0.05
SULFATE (SO4)	%	<= 0.005	<0.005
INSOLUBLE MATTER	%	<= 0.005	0.003
IRON (Fe)	%	<= 0.001	<0.001
SODIUM (Na)	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above. If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

RS

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC



R: 02/20/20
53

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

For ICP-MS use: dilute the ICV1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA: dilute the ICV5 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide: dilute the ICV6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

ICV1-1014		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2520	504
Sb	1010	202
As	997	199
Ba	518	104
Be	514	103
Cd	514	103
Ca	10000	2000
Cr	517	103
Co	521	104
Cu	505	101
Fe	10100	2020
Pb	1030	206
Mg	5990	1198
Mn	524	105
Ni	525	105
K	9940	1988
Se	1030	206
Ag	252	50
Na	10100	2020
Tl	1040	208
V	504	101
Zn	1010	202

ICV5-0415		ICV6-0400	
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

W3011
W3012
W3013
W3014
W3015

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



M 6041-4b
MS

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

 **avantor™**

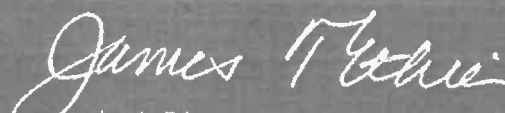


Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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

avantor™



R → 16/13/24
Met dig

M 6121

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

Certificate of Analysis

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

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

Avantor Performance Materials, LLC

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

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

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

For Laboratory, Research or Manufacturing Use

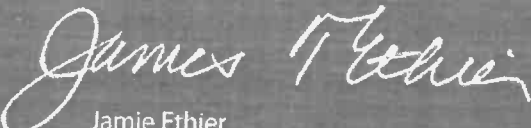
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier

Vice President Global Quality

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

Avantor Performance Materials, LLC

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

Nitric Acid 69%
CMOS



R → 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantor**TM



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
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For Microelectronic Use

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



Jamie Croak
Director Quality Operations, Bioscience Production

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

 **avantor™**



M6151

R → 11/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

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

 **avantorsm**



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

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



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
------	---------------	--------

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

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

A handwritten signature in cursive script that reads 'Jamie Ethier'.
Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™



R- 0210212025

m - 6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantorsTM**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
------	---------------	--------

For Microelectronic Use

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



Jamie Croak
Director Quality Operations, Bioscience Production

Sodium Phosphate, Monobasic, Monohydrate,
Crystal
BAKER ANALYZED® A.C.S. Reagent

(sodium dihydrogen phosphate, monohydrate)



Material No.: 3818-05
Batch No.: 0000225799
Manufactured Date: 2018/12/05
Retest Date: 2025/12/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	98.0 – 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 – 4.5	4.3
Insoluble Matter	≤ 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

W 2979

Rec: 12/09/22

exp. 12/09/27

Product Name:

1,5-Diphenylcarbazide - ACS reagent

Product Number:

259225

Batch Number:

MKCR6636

Brand:

SIAL

CAS Number:

140-22-7

MDL Number:

MFCD00003013

Formula:

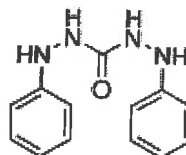
C₁₃H₁₄N₄O

Formula Weight:

242.28 g/mol

Quality Release Date:

02 JUN 2022



Certificate of Analysis

Test	Specification	Result
Appearance (Color)	Conforms to Requirements	Pink
Off-White to Pink, Light Purple or Tan		
Appearance (Form)	Powder or Chunks	Powder
Melting Point	173.0 - 176.0 °C	173.0 °C
Infrared Spectrum	Conforms to Structure	Conforms
Residue on ignition (Ash)	≤ 0.05 %	0.01 %
15 minutes, 800 Degrees Celsius		
Solubility	Pass	Pass
Sensitivity Test	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms



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.





Certificate of Analysis



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

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

Storage: Room Temperature

Pellets

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

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.



Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

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

Storage: Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

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28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

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Product meets analytical specifications of the grades listed.



Part of TCP Analytical Group

Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

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

Product Code: **LC13545**

Manufacture Date: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

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

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

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

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

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

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

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

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

2024080113:32:16bsturges-0-0

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

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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.

Chem-Impex International, Inc.

Tel: (630) 766-2112**E-mail:** sales@chemimpex.com**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218**Web site:** www.chemimpex.com**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Lot Number	002126-2019-201
Product	Magnesium chloride hexahydrate

Magnesium chloride•6H₂O

CAS Number	7791-18-6
Molecular Formula	MgCl ₂ •6H ₂ O
Molecular Weight	203.3

Appearance	White crystals
Solubility	167 g in 100 mL water
Melting Point	~ 115 °C
Heavy Metals	4.393 ppm
Anion	Nitrate (NO ₃) : < 0.001% Phosphate (PO ₄) : < 5 ppm Sulfate (SO ₄) : < 0.002%
Cation	Ammonium (NH ₄) : < 0.002% Barium (Ba) : 0.005% Calcium (Ca) : 0.01% Iron (Fe) : 4.5 ppm Manganese (Mn) : 0.624 ppm Potassium (K) : 0.004% Sodium (Na) : 0.000003% Strontium (Sr) : 0.005%
Insoluble material	0.0021%
Assay by titration	100.83%
Grade	ACS reagent
Storage	Store at RT

Certificate of Analysis

Catalog Number: 01237

Lot Number: 002126-2019-201

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

A handwritten signature in black ink, appearing to read 'Bala Kumar', with a stylized flourish at the end.

Bala Kumar
Quality Control Manager



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

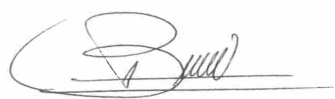
Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN ⁻)	995-1005 ppm	1000 ppm

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)

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

Luis Briceno (11/22/2024)
Operations Supervisor

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



W3163 Rec. on 12/10/24 by IZ

Certificate of Analysis



Material BDH9284-2.5KG
Material Description BDH SODIUM CARB ANHYD ACS 2.5KG
Grade U S P REAGENT (ACS GRADE)

Batch 24E3156178
Reassay Date 09/30/2027
CAS Number 497-19-8
Molecular Formula Na₂CO₃
Molecular Mass 105.99

Date of Manufacture 09/01/2023
Storage Room Temperature
Material is hygroscopic. Protect from Moisture.
Additional Product Description:

Characteristics	Specifications	Measured Values
Appearance	Fine white granular powder	Fine white granular powder
Calcium	<= 0.03 %	0.003 %
Chloride	<= 0.001 %	0.0003 %
Heavy Metals (as Pb)	<= 0.0005 %	0.0001 %
Insolubles	<= 0.01 %	0.001 %
Iron	<= 0.0005 %	0.0001 %
Loss on Heating	<= 1.0 %	0.03 %
Magnesium	<= 0.005 %	0.001 %
Phosphate	<= 0.001 %	0.001 %
Potassium	<= 0.005 %	0.003 %
Purity	>= 99.5 %	100.0 %
Silica	<= 0.005 %	0.001 %
Sulfur Compounds	<= 0.003 %	0.002 %
Extra Description:	Meets Reagent Specifications for testing USP/NF monographs	

Internal ID #: 710

Signature	Additional Information
We certify that this batch conforms to the specifications listed above. 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	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.



Material	BDH9266-500G
Material Description	BDH POTASS PHOSPHAT DBSC 500GM
Grade	ACS GRADE
Batch	24H0856239
Reassay Date	04/19/2028
CAS Number	7758-11-4
Molecular Formula	K ₂ HPO ₄
Molecular Mass	174.18
Date of Manufacture	04/19/2024
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	Fine white crystalline powder	Fine white crystalline powder
Chloride	<= 0.003 %	0.002 %
Heavy Metals (as Pb)	<= 0.0005 %	<0.0005 %
Insolubles	<= 0.01 %	<0.01 %
Iron	<= 0.001 %	<0.001 %
Loss on Drying	<= 1.0 %	<0.5 %
Nitrogen Compounds	<= 0.001 %	<0.001 %
pH (5%, Water) @25C	8.5 - 9.6	8.8
Purity	>= 98.0 %	99.1 %
Sodium	<= 0.05 %	<0.05 %
Sulfate	<= 0.005 %	<0.002 %
CUSTOMER PART # BDH9266-500G		

Internal ID #: 793

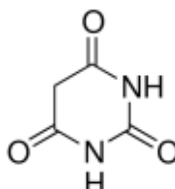
Signature	Additional Information
We certify that this batch conforms to the specifications listed above. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits Product meets analytical specifications of the grades listed.

Certificate of Analysis

Product Name:

Barbituric acid - ReagentPlus® , 99%

Product Number: 185698
Batch Number: WXBFB3271V
Brand: SIAL
CAS Number: 67-52-7
Formula: C₄H₄N₂O₃
Formula Weight: 128,09 g/mol
Quality Release Date: 16 MAY 2024



Test	Specification	Result
Appearance (Colour)	White to Off-White	White
Appearance (Form)	Powder	Powder
Infrared spectrum	Conforms to Structure	Conforms
Purity (Titration by NaOH)	98.5 - 101.5 %	100.4 %
GC (area %)	≥ 98 %	100 %
VPCT		



Kang Chen
Quality Manager
Wuxi , China CN

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.

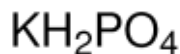


Certificate of Analysis

Product Name:

Potassium phosphate monobasic - ACS reagent, ≥99.0%

Product Number: P0662
Batch Number: MKCX1379
Brand: SIGALD
CAS Number: 7778-77-0
MDL Number: MFCD00011401
Formula: H₂KO₄P
Formula Weight: 136.09 g/mol
Quality Release Date: 27 JAN 2025
Recommended Retest Date: JAN 2029



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder or Crystals	Crystals
Assay	≥ 99.0 %	99.9 %
Insoluble Matter	≤ 0.01 %	< 0.01 %
Loss on Drying	≤ 0.2 %	< 0.1 %
At 105°C		
pH	4.1 - 4.5	4.5
(c = 5%, 25 deg C)		
Chloride Content	≤ 0.001 %	< 0.001 %
Sulfate (SO ₄)	≤ 0.003 %	< 0.003 %
Heavy Metals	≤ 0.001 %	< 0.001 %
by ICP		
Iron (Fe)	≤ 0.002 %	< 0.001 %
Sodium (Na)	≤ 0.005 %	< 0.001 %
Recommended Retest Period	-----	-----
4 Years		



Larry Coers, Director
Quality Control
Milwaukee, WI US

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PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1913-01	WC-12-S-202504	1	1.18	10.32	11.5	9.49	80.5	
Q1913-03	WC-13-S-202504	2	1.19	10.37	11.56	9.83	83.3	
Q1936-01	SMALL-PILE-A	33	1.15	9.94	11.09	10.18	90.8	
Q1936-02	SMALL-PILE-A	34	1.17	9.94	11.11	10.22	91.0	
Q1936-03	SMALL-PILE-B	35	1.18	10.39	11.57	10.93	93.8	
Q1936-04	SMALL-PILE-B	36	1.18	9.88	11.06	10.44	93.7	
Q1936-05	SMALL-PILE-C	37	1.15	10.03	11.18	10.9	97.2	
Q1936-06	SMALL-PILE-C	38	1.15	10.25	11.4	11.01	96.2	
Q1936-07	SMALL-PILE-D	39	1.16	10.41	11.57	10.97	94.2	
Q1936-08	SMALL-PILE-D	40	1.18	9.96	11.14	10.55	94.1	
Q1937-01	LARGE-PILE-A	41	1.15	10.13	11.28	10.7	94.3	
Q1937-02	LARGE-PILE-A	42	1.18	9.58	10.76	10.2	94.2	
Q1937-03	LARGE-PILE-B	43	1.15	10.03	11.18	10.82	96.4	
Q1937-04	LARGE-PILE-B	44	1.17	10.04	11.21	10.72	95.1	
Q1937-05	LARGE-PILE-C	45	1.16	10.19	11.35	10.83	94.9	
Q1937-06	LARGE-PILE-C	46	1.19	10.06	11.25	10.63	93.8	
Q1937-07	LARGE-PILE-D	47	1.18	10.33	11.51	10.95	94.6	
Q1937-08	LARGE-PILE-D	48	1.17	9.75	10.92	10.33	93.9	
Q1937-09	LARGE-PILE-E	49	1.16	10.14	11.3	10.52	92.3	
Q1937-10	LARGE-PILE-E	50	1.18	10.30	11.48	10.76	93.0	
Q1937-11	LARGE-PILE-F	51	1.18	10.48	11.66	10.58	89.7	
Q1937-12	LARGE-PILE-F	52	1.18	10.25	11.43	10.44	90.3	
Q1938-01	LOWER-WALL-PILE-A	53	1.15	10.33	11.48	10.77	93.1	
Q1938-02	LOWER-WALL-PILE-A	54	1.17	10.50	11.67	10.71	90.9	
Q1938-03	LOWER-WALL-PILE-B	55	1.14	10.15	11.29	10.94	96.6	
Q1938-04	LOWER-WALL-PILE-B	56	1.18	9.90	11.08	10.68	96.0	
Q1938-05	LOWER-WALL-PILE-C	57	1.17	10.23	11.4	11.07	96.8	
Q1938-06	LOWER-WALL-PILE-C	58	1.12	9.82	10.94	10.7	97.6	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1938-07	LOWER-WALL-PILE-D	59	1.19	10.01	11.2	10.7	95.0	
Q1938-08	LOWER-WALL-PILE-D	60	1.17	10.23	11.4	10.86	94.7	
Q1942-05	SVOC-GPC-BLANK	3	1.00	1.00	2.00	2.00	100.0	
Q1942-06	PEST-GPC-BLANK	4	1.00	1.00	2.00	2.00	100.0	
Q1942-07	PEST-GPC-BLANK-SPIKE	5	1.00	1.00	2.00	2.00	100.0	
Q1942-08	PCB-GPC-BLANK	6	1.00	1.00	2.00	2.00	100.0	
Q1942-09	PCB-GPC-BLANK-SPIKE	7	1.00	1.00	2.00	2.00	100.0	
Q1942-10	SVOC-GPC2-BLANK	8	1.00	1.00	2.00	2.00	100.0	
Q1942-11	PEST-GPC2-BLANK	9	1.00	1.00	2.00	2.00	100.0	
Q1942-12	PEST-GPC2-BLANK-SPIKE	10	1.00	1.00	2.00	2.00	100.0	
Q1942-13	PCB-GPC2-BLANK	11	1.00	1.00	2.00	2.00	100.0	
Q1942-14	PCB-GCP2-BLANK-SPIKE	12	1.00	1.00	2.00	2.00	100.0	
Q1944-01	MELTED-RUBBER-SAMPLE	13	1.00	1.00	2.00	2.00	100.0	MELTED-RUBBER-SAMPLE
Q1946-01	BB-CONCRETE	14	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1946-02	BB-CONCRETE	15	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1947-01	MH-P	16	1.18	10.19	11.37	9.28	79.5	
Q1947-02	MH-P-EPH	17	1.15	10.84	11.99	10.64	87.5	
Q1947-03	MH-P-VOC	18	1.16	10.71	11.87	10.5	87.2	
Q1947-05	MH-O	19	1.14	10.59	11.73	10.52	88.6	
Q1947-06	MH-O-EPH	20	1.12	10.00	11.12	9.91	87.9	
Q1947-07	MH-O-VOC	21	1.17	10.00	11.17	9.95	87.8	
Q1951-01	MH-KK	22	1.18	10.40	11.58	10.01	84.9	
Q1951-02	MH-KK-EPH	23	1.16	10.29	11.45	9.91	85.0	
Q1951-03	MH-KK-VOC	24	1.17	10.25	11.42	9.86	84.8	
Q1952-01	CLEAN-FILL	25	1.18	10.49	11.67	8.98	74.4	
Q1952-02	CLEAN-FILL-E2	26	1.13	10.10	11.23	8.47	72.7	
Q1953-01	AUD-25-0075	27	1.00	1.00	2.00	2.00	100.0	pile
Q1953-02	AUD-25-0076	28	1.00	1.00	2.00	2.00	100.0	pile



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/5/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 05/02/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:25
Out Date: 05/03/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135646

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
Q1953-03	AUD-25-0077	29	1.00	1.00	2.00	2.00	100.0	oilc
Q1954-01	BC260874-1-1	30	1.00	1.00	2.00	2.00	100.0	oilc
Q1954-02	BC260874-1-2	31	1.00	1.00	2.00	2.00	100.0	oilc
Q1955-01	LAW-25-0066	32	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids

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

WORKLIST(Hardcopy Internal Chain)

173546

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1913-01	WC-12-S-202504	Solid	Percent Solids	Cool 4 deg C	AECO02	L21	04/29/2025	Chemtech -SO
Q1913-03	WC-13-S-202504	Solid	Percent Solids	Cool 4 deg C	AECO02	L21	04/29/2025	Chemtech -SO
Q1936-01	SMALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-02	SMALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-03	SMALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-04	SMALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-05	SMALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-06	SMALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-07	SMALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1936-08	SMALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L51	05/01/2025	Chemtech -SO
Q1937-01	LARGE-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-02	LARGE-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-03	LARGE-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-04	LARGE-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-05	LARGE-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-06	LARGE-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-07	LARGE-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-08	LARGE-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-09	LARGE-PILE-E	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-10	LARGE-PILE-E	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1937-11	LARGE-PILE-F	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 05/02/25 17:10

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

1725546

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1937-12	LARGE-PILE-F	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-01	LOWER-WALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-02	LOWER-WALL-PILE-A	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-03	LOWER-WALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-04	LOWER-WALL-PILE-B	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-05	LOWER-WALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-06	LOWER-WALL-PILE-C	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-07	LOWER-WALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1938-08	LOWER-WALL-PILE-D	Solid	Percent Solids	Cool 4 deg C	SAXT01	L41	05/01/2025	Chemtech -SO
Q1942-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	05/01/2025	Chemtech -SO
Q1942-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1942-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	L41	04/25/2025	Chemtech -SO
Q1944-01	MELTED-RUBBER-SAMPLE	Solid	Percent Solids	Cool 4 deg C	METE01	L41	05/02/2025	Chemtech -SO
Q1946-01	BB-CONCRETE	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: *Se Lee*

Raw Sample Relinquished by: *Se Lee*

Date/Time 05/02/25

Raw Sample Received by: *Se Lee*

Raw Sample Relinquished by: *Se Lee*

WORKLIST(Hardcopy Internal Chain)

8/23/25

WorkList Name : %1-050225

WorkList ID : 189289

Department : Wet-Chemistry

Date : 05-02-2025 14:36:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1946-02	BB-CONCRETE	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-01	MH-P	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-02	MH-P-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-03	MH-P-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-05	MH-O	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-06	MH-O-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1947-07	MH-O-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1951-01	MH-KK	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1951-02	MH-KK-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1951-03	MH-KK-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1952-01	CLEAN-FILL	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/02/2025	Chemtech -SO
Q1952-02	CLEAN-FILL-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/02/2025	Chemtech -SO
Q1953-01	AUD-25-0075	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	05/02/2025	Chemtech -SO
Q1953-02	AUD-25-0076	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1953-03	AUD-25-0077	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1954-01	BC260874-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1954-02	BC260874-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO
Q1955-01	LAW-25-0066	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	05/02/2025	Chemtech -SO

Date/Time 05/02/25 15:10

Raw Sample Received by: 88 WOC,

Raw Sample Relinquished by: 88 WOC,

Date/Time 05/02/25

Raw Sample Received by: 88 WOC,

Raw Sample Relinquished by: 88 WOC,



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Saxton Fall and Sand Gravel
ADDRESS: 3000 International Drive
CITY: Budd Lake STATE: N.J. ZIP:
ATTENTION: Rich Schindler
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Stan Hope
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY: Stan STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS:

DATA TURNAROUND INFORMATION

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

DATA DELIVERABLE INFORMATION

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

1. Hex Chrom
2. PCB
3. SVOC-TCL BWA-20
4. TPH CAC
5. Trivalent Chromium
6. Cyanide
7. VOI-TCL VOA-10
8. EPH
9.

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	<u>Lower Wall Pile-A</u>	<u>sol</u>	<u>X</u>		<u>5-1-25</u>	<u>12:50</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				<u>Pid=0.0</u>	
2.	<u>A</u>			<u>X</u>		<u>12:52</u>	<u>5</u>							<u>X</u>	<u>X</u>			
3.	<u>B</u>		<u>X</u>			<u>13:00</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
4.	<u>B</u>			<u>X</u>		<u>13:02</u>	<u>5</u>							<u>X</u>	<u>X</u>			
5.	<u>C</u>		<u>X</u>			<u>13:12</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
6.	<u>C</u>			<u>X</u>		<u>13:14</u>	<u>5</u>							<u>X</u>	<u>X</u>			
7.	<u>D</u>		<u>X</u>			<u>13:20</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
8.	<u>D</u>			<u>X</u>		<u>13:22</u>	<u>5</u>							<u>X</u>	<u>X</u>			
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>5-1-2025</u>	RECEIVED BY: 1. <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP <u>4.1°C</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME: <u></u>	RECEIVED BY: 2. <u>[Signature]</u>	Comments: <u>Pid Meter calibrated 5-1-2025</u> <u>Equal volume of soil used, 5:1 Composite</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>5-1-2025</u>	RECEIVED BY: 3. <u>[Signature]</u>	Page <u>1</u> of <u>1</u> CLIENT: ☐ Hand Delivered ☐ Other <u></u> Shipment Complete ☐ YES ☐ NO



Environmental Laboratory

www.chemtech.net | EMAIL: PM@chemtech.net

Project Name: Sten Hope

Chemtech Order ID: _____

Sampler Name: Lawrence Pate

Client Project Coordinator & Phone: _____

Service Order #: _____

Work Order #: _____

Labor WBS #: _____

Facility/Site: _____

Site Address: 3000 Interchange

Arrive Time: 0830

Drive, Budd Lake, NJ.

Depart Time: 1410

Page #: 1 of 1

Date: 5.1.2025

Waste Stream (circle one): drum / roll-off / soil pile / in-situ / linear construction / frac-tank

Sample Matrices (circle all that apply): Water / Solid / NAPL / Concrete / Wipe

Collection Depth: _____

Dimensions/CY: _____

Temp (range): _____

°C PID Readings (range): _____

PPM

Odor: Y / N

Color: Y / N

Sample Description: Brown soil, Rocks.

Field Observations: Sample 6, small pile, large pile, however well pile.

Grid/Area Composite Map:

QA Control # A3041134

SEE

ATTACHED

Sampler Signature: _____

5.1.2025

Supervisor Review/Date: _____

Client Signature: _____

Date/Time Arrived at Lab: _____

Lower Wall

EXHIBIT 1

Soil Piles for Sampling

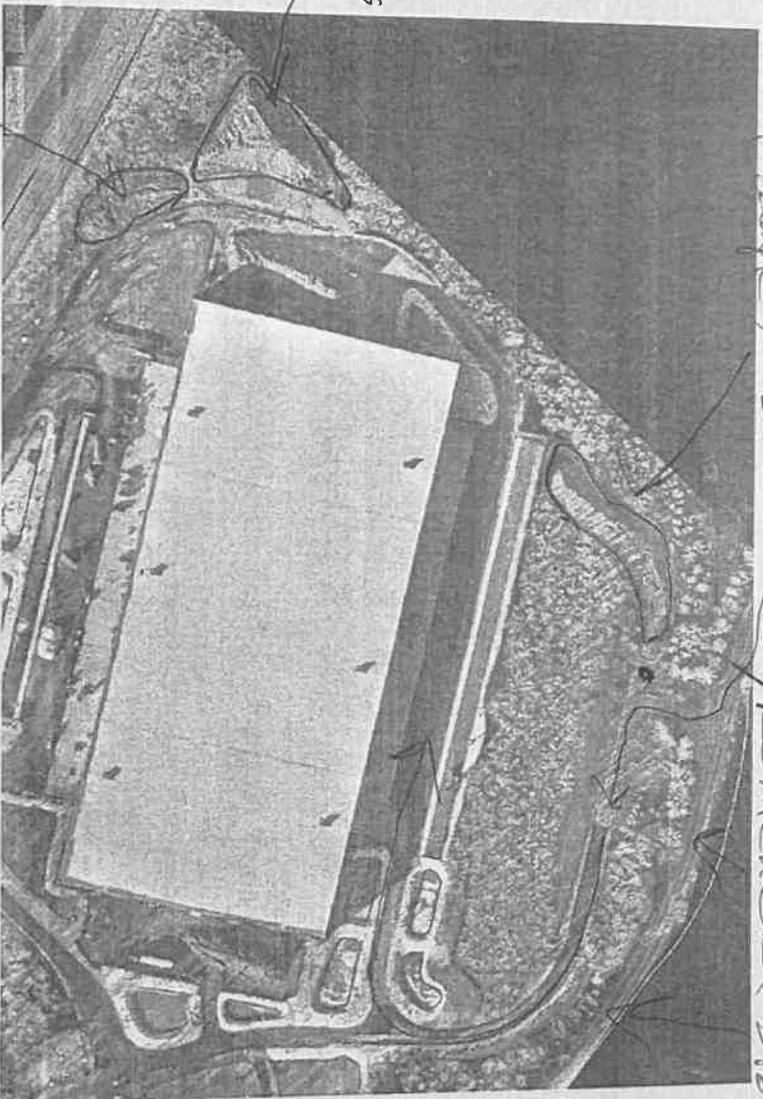
Piles for sampling are circled in red

3 tests

Pile

4 Samples 25" #

Contenetal Dr.



6 Samples

Large Pile
30" #

4 Samples

Small Pile
20" #

Total 14 Samples

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1938	SAXT01	Order Date : 5/1/2025 2:05:00 PM	Project Mgr :
Client Name : Saxton Falls Sand and Grav		Project Name : Stan Hope	Report Type : Level 1
Client Contact : Rich Schindelar		Receive DateTime : 5/1/2025 12:00:00 AM 15:40	EDD Type : Excel NJ
Invoice Name : Saxton Falls Sand and Grav		Purchase Order :	Hard Copy Date :
Invoice Contact : Rich Schindelar			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1938-02	LOWER-WALL-PILE-A	Solid	05/01/2025	12:52	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-04	LOWER-WALL-PILE-B	Solid	05/01/2025	13:02	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-06	LOWER-WALL-PILE-C	Solid	05/01/2025	13:14	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1938-08	LOWER-WALL-PILE-D	Solid	05/01/2025	13:22	VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By :

Date / Time :

LCJ

5-1-2025 1650

Received By :

Date / Time :

Wm Duden

5-1-25 16:5

Storage Area : VOA Refridgerator Room

Touch
Storage in VOA
FRZ # 02 Extract
in set # 06