

Cover Page

Order ID : P4681

Project ID : Parsippany Wastewater Quarterly 2024

Client : METEM A GE POWER Business

Lab Sample Number

P4681-01
P4681-02

Client Sample Number

Q4-WW
PH

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: 11/20/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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 #: P4681

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: KETAN PATEL

Date: 11/20/2024

LAB CHRONICLE

OrderID:	P4681	OrderDate:	11/1/2024 3:08:00 PM
Client:	METEM A GE POWER Business	Project:	Parsippany Wastewater Quarterly 2024
Contact:	Sundas Pervez	Location:	L12

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4681-01	Q4-WW	WATER			11/01/24 14:55			11/01/24
			Cyanide	SM4500-CN C,E		11/11/24	11/11/24 12:54	
P4681-02	PH	WATER			11/01/24 14:55			11/01/24
			Field pH	SM4500-H B			11/01/24 14:56	



SAMPLE DATA

Report of Analysis

Client:	METEM A GE POWER Business	Date Collected:	11/01/24 14:55
Project:	Parsippany Wastewater Quarterly 2024	Date Received:	11/01/24
Client Sample ID:	Q4-WW	SDG No.:	P4681
Lab Sample ID:	P4681-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Cyanide	0.00093	U	1	0.00093	0.0050	mg/L	11/11/24 08:00	11/11/24 12:54	SM 4500-CN C-16 plus E-16

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:	METEM A GE POWER Business	Date Collected:	11/01/24 14:55
Project:	Parsippany Wastewater Quarterly 2024	Date Received:	11/01/24
Client Sample ID:	PH	SDG No.:	P4681
Lab Sample ID:	P4681-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Field pH	7.09		1	0	0	pH		11/01/24 14:56	SM4500-H B

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: METEM A GE POWER Business

SDG No.: P4681

Project: Parsippany Wastewater Quarterly 2024

RunNo.: LB133393

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: Cyanide	ICV1	mg/L	0.097	0.099	98	85-115	11/11/2024
Sample ID: Cyanide	CCV1	mg/L	0.25	0.25	100	90-110	11/11/2024
Sample ID: Cyanide	CCV2	mg/L	0.25	0.25	100	90-110	11/11/2024

Initial and Continuing Calibration Verification

Client: METEM A GE POWER Business

SDG No.: P4681

Project: Parsippany Wastewater Quarterly 2024

RunNo.: LB133523

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	ICV						
Field pH		pH	7.00	7	100	90-110	11/01/2024
Sample ID:	CCV1						
Field pH		pH	7.00	7.00	100	90-110	11/01/2024
Sample ID:	CCV2						
Field pH		pH	7.00	7.00	100	90-110	11/01/2024

Initial and Continuing Calibration Blank Summary

Client: METEM A GE POWER Business

SDG No.: P4681

Project: Parsippany Wastewater Quarterly 2024

RunNo.: LB133393

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00093	0.005	11/11/2024
Sample ID: CCB1 Cyanide	mg/L	< 0.0025	0.0025	U	0.00093	0.005	11/11/2024
Sample ID: CCB2 Cyanide	mg/L	< 0.0025	0.0025	U	0.00093	0.005	11/11/2024

Preparation Blank Summary

Client: METEM A GE POWER Business

SDG No.: P4681

Project: Parsippany Wastewater Quarterly 2024

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: Cyanide	PB164714BL mg/L	< 0.0025	0.0025	U	0.00093	0.005	11/11/2024

Matrix Spike Summary

Client:	METEM A GE POWER Business	SDG No.:	P4681
Project:	Parsippany Wastewater Quarterly 2024	Sample ID:	P4762-01
Client ID:	EFF-WWMS	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/L	75-125	0.047		0.0027	J	0.04	1	111		11/11/2024

Matrix Spike Summary

Client:	METEM A GE POWER Business	SDG No.:	P4681
Project:	Parsippany Wastewater Quarterly 2024	Sample ID:	P4762-01
Client ID:	EFF-WWMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Cyanide	mg/L	75-125	0.047		0.0027	J	0.04	1	111		11/11/2024

Duplicate Sample Summary

Client:	METEM A GE POWER Business	SDG No.:	P4681
Project:	Parsippany Wastewater Quarterly 2024	Sample ID:	P4681-02
Client ID:	PHDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Field pH	pH	+/-20	7.09		7.10		1	0.14		11/01/2024

Duplicate Sample Summary

Client:	METEM A GE POWER Business	SDG No.:	P4681
Project:	Parsippany Wastewater Quarterly 2024	Sample ID:	P4762-01
Client ID:	EFF-WWDUP	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/L	+/-20	0.0027	J	0.0028	J	1	4		11/11/2024

Duplicate Sample Summary

Client:	METEM A GE POWER Business	SDG No.:	P4681
Project:	Parsippany Wastewater Quarterly 2024	Sample ID:	P4762-01
Client ID:	EFF-WWMSD	Percent Solids for Spike Sample:	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Cyanide	mg/L	+/-20	0.047		0.047		1	0		11/11/2024

Laboratory Control Sample Summary

Client: METEM A GE POWER Business

SDG No.: P4681

Project: Parsippany Wastewater Quarterly 2024

Run No.: LB133393

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB164714BS							
Cyanide	mg/L	0.1	0.098		98	1	85-115	11/11/2024



RAW DATA

Test results

Aquakem 7.2AQ1

Page:

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

Reviewed by : NF Instrument ID : Konelab

11/11/2024 13:14

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	96.669	0.0	0.075	
ICB1	0.776	0.0	0.002	
CCV1	249.708	0.0	0.192	
CCB1	0.040	0.0	0.002	
RL CHECK	5.060	0.0	0.006	
PB164714BL	0.317	0.0	0.002	
PB164714BS	97.943	0.0	0.076	
MIDPB164714	248.475	0.0	0.191	
P4632-01	2.495	0.0	0.004	
P4681-01	0.171	0.0	0.002	
P4762-01	2.678	0.0	0.004	
P4762-01DUP	2.763	0.0	0.004	
P4762-01MS	46.628	0.0	0.037	
P4762-01MSD	46.723	0.0	0.037	
CCV2	252.119	0.0	0.193	
CCB2	-0.195	0.0	0.002	

99.39%, (90-110) NF

11.11.2024

N 16
Mean 65.773
SD 97.2223
CV% 147.81

Aquakem v. 7.2AQ1

Results from time period:

Mon Nov 11 11:56:31 2024

Mon Nov 11 13:08:54 2024

Sample Id	Sam/C	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.1072	µg/l	11/11/2024 11:56:31	
5.0PPBCN	A	Total CN	P	4.4814	µg/l	11/11/2024 11:56:32	
10PPBCN	A	Total CN	P	9.8012	µg/l	11/11/2024 11:56:33	
50PPBCN	A	Total CN	P	49.0713	µg/l	11/11/2024 11:56:34	
100PPBCN	A	Total CN	P	100.1423	µg/l	11/11/2024 11:56:35	
250PPBCN	A	Total CN	P	253.0749	µg/l	11/11/2024 11:56:36	
500PPBCN	A	Total CN	P	498.5361	µg/l	11/11/2024 11:56:37	
ICV1	S	Total CN	P	96.669	µg/l	11/11/2024 12:46:32	
ICB1	S	Total CN	P	0.7761	µg/l	11/11/2024 12:46:34	
CCV1	S	Total CN	P	249.7077	µg/l	11/11/2024 12:46:35	
CCB1	S	Total CN	P	0.0396	µg/l	11/11/2024 12:46:38	
RL CHECK	S	Total CN	P	5.0604	µg/l	11/11/2024 12:46:40	
PB164714BL	S	Total CN	P	0.3169	µg/l	11/11/2024 12:46:41	
PB164714BS	S	Total CN	P	97.943	µg/l	11/11/2024 12:54:07	
MIDPB164714	S	Total CN	P	248.4752	µg/l	11/11/2024 12:54:10	
P4632-01	S	Total CN	P	2.4947	µg/l	11/11/2024 12:54:11	
P4681-01	S	Total CN	P	0.1711	µg/l	11/11/2024 12:54:14	
P4762-01	S	Total CN	P	2.6782	µg/l	11/11/2024 12:54:16	
P4762-01DUP	S	Total CN	P	2.7628	µg/l	11/11/2024 13:00:28	
P4762-01MS	S	Total CN	P	46.6278	µg/l	11/11/2024 13:08:47	
P4762-01MSD	S	Total CN	P	46.7235	µg/l	11/11/2024 13:08:48	
CCV2	S	Total CN	P	252.1195	µg/l	11/11/2024 13:08:52	
CCB2	S	Total CN	P	-0.1952	µg/l	11/11/2024 13:08:53	

Calibration results

Aquakem 7.2AQ1

Page:

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

Reviewed by : NF Instrument ID : Konelab

11/11/2024 11:56

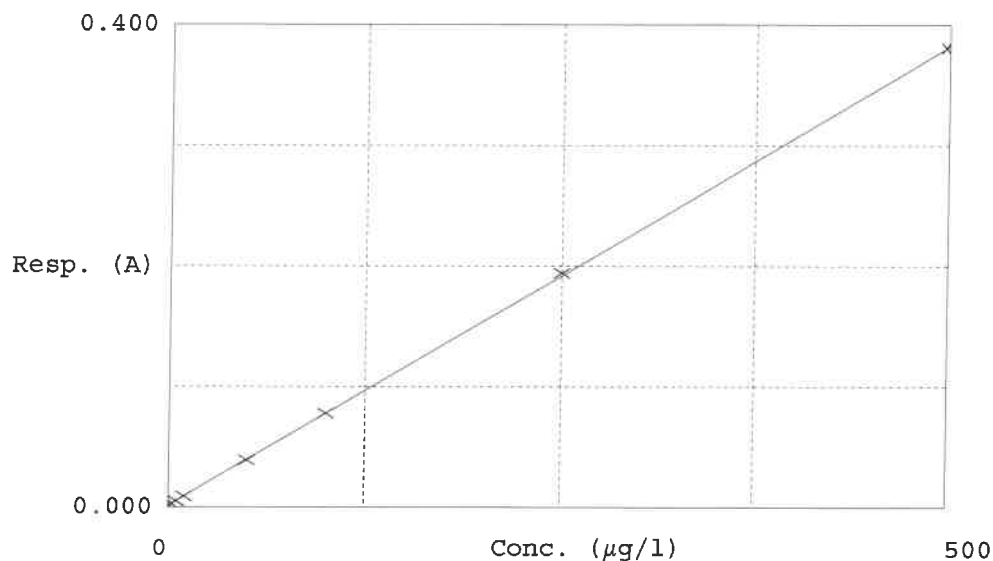
Test Total CN

Accepted 11/11/2024 11:56

Factor 1315
Bias 0.002

Coeff. of det. 0.999938

Errors



	Calibrator	Response	Calc. con.	Conc.	<i>Pe</i> Errors
1	0.0PPBCN	0.002	-0.1072	0.0000	
2	5.0PPBCN	0.005	4.4814	5.0000	-10.4
3	10PPBCN	0.009	9.8012	10.0000	-2.0
4	50PPBCN	0.039	49.0713	50.0000	-1.9
5	100PPBCN	0.078	100.1423	100.0000	0.1
6	250PPBCN	0.194	253.0749	250.0000	1.2
7	500PPBCN	0.381	498.5361	500.0000	-0.3

NF

11.11.2024

SOP ID : MSM4500-CN C,E-Cyanide-12

SDG No : N/A

Start Digest Date: 11/11/2024 Time : 08:00 Temp : 123 °C

Matrix : WATER

End Digest Date: 11/11/2024 Time : 09:30 Temp : 126 °C

Pipette ID : WC

Balance ID : N/A

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: 

Weigh By : N/A

pH Meter ID : N/A

Supervisor Signature: 

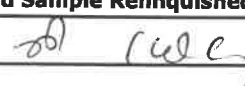
Standard Name	MLS USED	STD REF. # FROM LOG
LCSW	1.0ML	WP109549
MS/MSD SPIKE SOL.	0.4ML	WP110035
PBW	50.0ML	W3112
RL CHECK	50.0ML	WP110652
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP108640
50% v/v H2SO4	5.0ML	WP110391
51% w/v MgCL2	2.0ML	WP110390
pH Paper 0-14	N/A	W3104
Nitrate/Nitrite Strip	N/A	W3101
Lead Acetate strip	N/A	W3134
KI-starch paper	N/A	W2965
0.4N Sulfamic Acid	5ML	WP110388
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	W3011
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	2.5ML	WP110035
HIGHSTD	HIGHSTD	N/A	N/A
LOWSTD	LOWSTD	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11.11.2024, 09:45		NF(LWC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4632-01	EFFLUENT	50	50	>12	Negative	Negative	Negative	N/A	N/A
P4681-01	Q4-WW	50	50	>12	Negative	Negative	Positive	N/A	N/A
P4762-01	EFF-WW	50	50	>12	Negative	Negative	Negative	N/A	N/A
P4762-01DUP	EFF-WWDUP	50	50	>12	Negative	Negative	Negative	N/A	N/A
P4762-01MS	EFF-WWMS	50	50	>12	Negative	Negative	Negative	N/A	N/A
P4762-01MSD	EFF-WWMSD	50	50	>12	Negative	Negative	Negative	N/A	N/A
PB164714BL	PBW714	50	50	>12	Negative	Negative	Negative	N/A	N/A
PB164714BS	LCS714	50	50	>12	Negative	Negative	Negative	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : CN SM-11062024 WorkList ID : 185167 Department : Distillation Date : 11-06-2024 10:00:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4632-01	EFFLUENT	Water	Cyanide	10 N NaOH to pH >12	LEOI01	K63	10/29/2024	SM4500-CN C
P4681-01	Q4-WW	Water	Cyanide	1:1 NaOH to pH >12	METE01	L12	11/01/2024	SM4500-CN C

Date/Time 11.11.2024, 07:40
Raw Sample Received by: MWC
Raw Sample Relinquished by: MWC

Date/Time 11.11.2024, 9:00
Raw Sample Received by: MWC
Raw Sample Relinquished by: MWC

WORKLIST(Hardcopy Internal Chain)

WorkList Name : cn water p4772 WorkList ID : 185277 Department : Distillation Date : 11-09-2024 07:40:03

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4762-01C	EFF-WW	Water	Cyanide	1:1 NaOH to pH >12	ARDM01	L11	11/07/2024	SM4500-CN C

Date/Time 11.11.2024, 07:40
Raw Sample Received by: J. C. C
Raw Sample Relinquished by: J. C. C

Date/Time 11.11.2024, 9:00
Raw Sample Received by: J. C. C
Raw Sample Relinquished by: J. C. C

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133393

Review By	Niha	Review On	11/13/2024 10:35:03 AM
Supervise By	Iwona	Supervise On	11/13/2024 1:27:28 PM
SubDirectory	LB133393	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP110647,WP110648,WP110649,WP110650,WP110651,WP110652,WP110653		
ICV Standard	W3011		
CCV Standard	WP110648		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP109549		
Chk Standard	WP109068,WP110103,WP110645		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	11/11/24 11:56		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	11/11/24 11:56		Niha	OK
3	10PPBCN	10PPBCN	CAL3	11/11/24 11:56		Niha	OK
4	50PPBCN	50PPBCN	CAL4	11/11/24 11:56		Niha	OK
5	100PPBCN	100PPBCN	CAL5	11/11/24 11:56		Niha	OK
6	250PPBCN	250PPBCN	CAL6	11/11/24 11:56		Niha	OK
7	500PPBCN	500PPBCN	CAL7	11/11/24 11:56		Niha	OK
8	ICV1	ICV1	ICV	11/11/24 12:46		Niha	OK
9	ICB1	ICB1	ICB	11/11/24 12:46		Niha	OK
10	CCV1	CCV1	CCV	11/11/24 12:46		Niha	OK
11	CCB1	CCB1	CCB	11/11/24 12:46		Niha	OK
12	RL	RL	SAM	11/11/24 12:46		Niha	OK
13	PB164714BL	PB164714BL	MB	11/11/24 12:46		Niha	OK
14	PB164714BS	PB164714BS	LCS	11/11/24 12:54		Niha	OK
15	MIDPB164714	MIDPB164714	SAM	11/11/24 12:54		Niha	OK
16	P4632-01	EFFLUENT	SAM	11/11/24 12:54		Niha	OK
17	P4681-01	Q4-WW	SAM	11/11/24 12:54		Niha	OK
18	P4762-01	EFF-WW	SAM	11/11/24 12:54		Niha	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133393

Review By	Niha	Review On	11/13/2024 10:35:03 AM
Supervise By	Iwona	Supervise On	11/13/2024 1:27:28 PM
SubDirectory	LB133393	Test	Cyanide
STD. NAME	STD REF.#		
ICAL Standard	WP110647,WP110648,WP110649,WP110650,WP110651,WP110652,WP110653		
ICV Standard	W3011		
CCV Standard	WP110648		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP109549		
Chk Standard	WP109068,WP110103,WP110645		

19	P4762-01DUP	EFF-WWDUP	DUP	11/11/24 13:00		Niha	OK
20	P4762-01MS	EFF-WWMS	MS	11/11/24 13:08		Niha	OK
21	P4762-01MSD	EFF-WWMSD	MSD	11/11/24 13:08		Niha	OK
22	CCV2	CCV2	CCV	11/11/24 13:08		Niha	OK
23	CCB2	CCB2	CCB	11/11/24 13:08		Niha	OK

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133523

Review By	JSathvara	Review On	11/20/2024 4:26:55 AM
Supervise By	pradip	Supervise On	11/20/2024 4:29:41 AM
SubDirectory	LB133523	Test	Field pH
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3071,W3071,W3094,W3093,W3071,W3071		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL2	CAL2	CAL	11/01/24 14:33		gorge	OK
2	CAL1	CAL1	CAL	11/01/24 14:36		gorge	OK
3	CAL3	CAL3	CAL	11/01/24 14:38		gorge	OK
4	ICV	ICV	ICV	11/01/24 14:40		gorge	OK
5	CCV1	CCV1	CCV	11/01/24 14:48		gorge	OK
6	P4681-02	PH	SAM	11/01/24 14:56		gorge	OK
7	P4681-02DUP	PHDUP	DUP	11/01/24 14:58		gorge	OK
8	CCV2	CCV2	CCV	11/01/24 15:02		gorge	OK

Prep Standard - Chemical Standard Summary

Order ID : P4681

Test : Cyanide,Field pH

Prepbatch ID : PB164714,

Sequence ID/Qc Batch ID: LB133393, LB133523,

Standard ID :

WP108640, WP109068, WP109549, WP110035, WP110103, WP110390, WP110391, WP110645, WP110646, WP110647, WP110648, WP110649, WP110650, WP110651, WP110652, WP110653,

Chemical ID :

E3657, M5673, M5929, W2668, W2882, W3001, W3011, W3019, W3071, W3093, W3094, W3101, W3104, W3112, W3138, W3139, W3142,



<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	WP108640	07/05/2024	01/05/2025	Rubina Mughal	WETCHEM_S CALE_4 (WC SC-4)	None	Iwona Zarych 07/08/2024
<u>FROM</u> 21.00000L of W3112 + 210.00000gram of E3657 = Final Quantity: 21.000 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	WP109068	08/06/2024	12/08/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC SC-5)	None	Iwona Zarych 08/07/2024
<u>FROM</u>	145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M5929 + 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>
3371	Cyanide LCS Spike Solution, 5PPM	WP109549	09/06/2024	01/05/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 09/06/2024
<u>FROM</u> 1.00000ml of W3138 + 199.00000ml of WP108640 = 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>
3850	Cyanide MS-MSD spiking solution, 5PPM	WP110035	10/03/2024	11/30/2024	Rubina Mughal	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 10/04/2024
<u>FROM</u> 1.00000ml of W3142 + 199.00000ml of WP108640 = 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>
539	CN BUFFER	WP110103	10/08/2024	04/08/2025	Rubina Mughal	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 10/08/2024
<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>
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	WP110390	10/24/2024	04/24/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Iwona Zarych 10/24/2024
<u>FROM</u>	500.00000ml of W3112 + 510.00000gram of W3001 = 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>
1714	Sulfuric Acid, 50% (v/v)	WP110391	10/24/2024	04/24/2025	Niha Farheen Shaik	None	None	Iwona Zarych 10/24/2024

FROM 1000.00000ml of M5673 + 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>
1582	Chloramine T solution, 0.014M	WP110645	11/11/2024	11/12/2024	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC SC-5)	None	Mohan Bera 11/12/2024

FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 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>
3456	Cyanide Intermediate Working Std, 5PPM	WP110646	11/11/2024	11/12/2024	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Mohan Bera 11/12/2024

FROM 0.25000ml of W3142 + 49.75000ml of WP108640 = 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	WP110647	11/11/2024	11/12/2024	Niha Farheen Shaik	None	None	Mohan Bera 11/12/2024

FROM 45.00000ml of WP108640 + 5.00000ml of WP110646 = 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>
3761	Calibration-CCV CN Standard 250 ppb	WP110648	11/11/2024	11/12/2024	Niha Farheen Shaik	None	None	Mohan Bera
								11/12/2024

FROM 2.50000ml of WP110646 + 47.50000ml of WP108640 = 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	WP110649	11/11/2024	11/12/2024	Niha Farheen Shaik	None	None	Mohan Bera
								11/12/2024

FROM 1.00000ml of WP110646 + 49.00000ml of WP108640 = 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	WP110650	11/11/2024	11/12/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Mohan Bera
FROM 0.50000ml of WP110646 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml <div></div>								

<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	WP110651	11/11/2024	11/12/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Mohan Bera
<p>FROM 1.00000ml of WP110647 + 49.00000ml of WP108640 = Final Quantity: 50.000 ml</p>								

<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	WP110652	11/11/2024	11/12/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3	Mohan Bera
FROM 0.50000ml of WP110647 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml <div></div>								

<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	WP110653	11/11/2024	11/12/2024	Niha Farheen Shaik	None	None	Mohan Bera 11/12/2024
<u>FROM</u> 50.00000ml of WP108640 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/08/2024	06/24/2024 / Al-Terek	06/07/2024 / Al-Terek	M5929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, 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.	EM-BX0035-3 / Barbituric Acid, 100 gms	1.00132.0100	04/30/2025	12/07/2021 /	11/30/2021 / apatel	W2882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Magnesium Chloride Hexahydrate ACS 10KG	002251-03319	06/06/2027	01/23/2023 / lwona	06/06/2022 / lwona	W3001

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2024	01/03/2024 / lwona	02/20/2020 / lwona	W3011

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 #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / lwona	W3071

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	4310g83	03/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3094

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	470112-662 / TEST STRIPES, NITRATE/NITRITE, PK50	402403	04/30/2026	05/02/2024 / lwona	04/10/2024 / lwona	W3101

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	1404G63	09/30/2024	04/22/2024 / lwona	04/22/2024 / lwona	W3104

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.	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.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1405J81	11/30/2024	09/25/2024 / lwona	09/25/2024 / lwona	W3142


W3071
Rec 12/6/23

Certificate of Analysis 12

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

Lot Number: 4308H30

Product Number: 1551

Manufacture Date: AUG 09, 2023

Expiration Date: JUL 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

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

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

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

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



Paul Brandon (08/09/2023)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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

W2918
W3001
rec. 06/06/22
exp. 06/06/27

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
Product	Magnesium chloride hexahydrate
Lot Number	002251-03319 Magnesium chloride•6H ₂ O
CAS Number	7791-18-6
Molecular Formula	MgCl ₂ •6H ₂ O
Molecular Weight	203.3

Appearance	Colorless crystals, very deliquescent
Heavy Metals	< 5 ppm
Anion	Nitrate : < 0.001% Phosphate : < 5 ppm Sulfate : < 0.002%
Cation	Ammonium : < 0.002% Barium : < 0.005% Calcium : 0.0006% Iron : < 5 ppm Manganese : 1.8 ppm Potassium : 0.0006% Sodium : 0.0008% Strontium : 0.0015%
Insoluble material	0.0025%
Assay by titration	100.29%
Grade	ACS reagent
Storage	Store at RT
Country of Origin	India

Certificate of Analysis

Catalog Number: 01237

Lot Number: 002251-03319

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



Bala Kumar
Quality Control Manager

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:

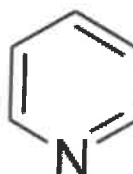
C₅H₅N

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

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	$\leq 0.005 \%$	$< 0.005 \%$	PASS
Chloride	$\leq 0.005 \%$	0.002 %	PASS
Heavy Metals	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Iron	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Magnesium	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Mercury	$\leq 0.1 \text{ ppm}$	$< 0.1 \text{ ppm}$	PASS
Nickel	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Nitrogen Compounds	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Phosphate	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Potassium	$\leq 0.02 \%$	$< 0.02 \%$	PASS
Purity	$\geq 97.0 \%$	99.2 %	PASS
Sodium Carbonate	$\leq 1.0 \%$	0.5 %	PASS
Sulfate	$\leq 0.003 \%$	$< 0.003 \%$	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

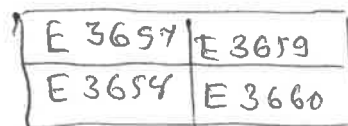
This document has been electronically produced and is valid without a signature.

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.





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**™



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



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



Certificate of Analysis

1.00132.0000 Barbituric acid for analysis EMSURE®
Batch N020065932

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

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

Ioannis Chartomatsidis
Responsible laboratory manager quality control

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

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



Certificate of Analysis

W3093
094121
04/03/2024
16

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

Lot Number: 4401F99

Product Number: 1551

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 2025

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

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

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

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

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

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

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

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

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

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



Paul Brandon (01/08/2024)

Production Manager

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

This product was tested in an ISO 17025 Accredited Laboratory

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Certificate of Analysis

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

Lot Number: 4310G83

Product Number: 1601

Manufacture Date: OCT 09, 2023

Expiration Date: MAR 2025

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

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

°C	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Blue Dye	Proprietary	

Test	Specification	Result
Appearance	Blue liquid	Passed

*Not a certified value.

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

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1601-16	500 mL natural poly	18 months
1601-5	20 L Cubitainer®	18 months

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



Paul Brandon (10/09/2023)

Production Manager

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This product was tested in an ISO 17025 Accredited Laboratory

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Certificate of Analysis

Cyanide Standard, 1000 ppm CN⁻

Lot Number: 1404G63

Product Number: 2543

Manufacture Date: APR 12, 2024

Expiration Date: SEP 2024

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)
2543-4	120 mL amber poly	6 months

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



Heidi J Green (04/12/2024)

Operations Manager

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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.

Certificate of Analysis

Cyanide Standard, 1000 ppm CN⁻

Lot Number: 1405J81

Product Number: 2543

Manufacture Date: MAY 20, 2024

Expiration Date: NOV 2024

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
2543-4	120 mL amber poly	6 months

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



Heidi J Green (05/20/2024)
Operations Manager

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SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Metem AGE Power Business
ADDRESS: 700 Parsippany Road,
CITY: Parsippany STATE: NJ ZIP: 07054
ATTENTION: Sundas Pervez
PHONE: 862-289-2531 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Parsippany Wastewater Quarterly 2024
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY 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

*Metals
Cyanide
Field Sampling
Field PH*

PRESERVATIVES

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	Q4 Wastewater	W	✓		11-24	1455	4	✓	✓	✓	✓						
2.																	PH 7.9
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1500</u>	RECEIVED BY: <u>1500</u>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>4.0</u> °C
1. <u>[Signature]</u>	DATE/TIME: <u>11-24</u>	RECEIVED BY: <u>[Signature]</u>	Comments:
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2. <u>[Signature]</u>		2. <u>[Signature]</u>	
RELINQUISHED BY SAMPLER:	DATE/TIME: <u>1615</u>	RECEIVED BY:	
3. <u>[Signature]</u>	DATE/TIME: <u>11-1-24</u>	3. <u>[Signature]</u>	
Page <u> </u> of <u> </u>		CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other	Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

CHEMTECH

FIELD SAMPLING LOG

Client Name: Metem Affairs Business
 Client Address: 700 Pat Siipany Rd
 Client Rep on Site: Sundas Perez

Sampling Date: 11-1-24 Departure Time: 1430

Arrival Time: 1430

Project Name: Pat Siipany
 Project Location: Pat Siipany
 Cooler Custody Seal: N/A
 Temperature Correction Factor (°C): +3

FIELD EQUIPMENT CALIBRATION (± 1%) (99% - 101%)

pH Calibration (± 1%) (99% - 101%) (SM4500-H B/9040C)

	7.00 Buffer	4.00 Buffer	10.00 Buffer	ICV (± 0.1 pH unit)
W	3071	3107	3094	3093
Time	1433	1436	1438	1440
Temp °C	17.79 °C	18.17 °C	18.53 °C	18.32 °C
pH	7.00	4.00	10.00	7.00

FIELD EQUIPMENT CALIBRATION (± 1%) (99% - 101%)

Specific Conductance (mS/cm) (99% - 101%) (mmho/cm) (SM2510 B/120.1/9050A)

	Calibration (± 1%) (99% - 101%)	ICV (± 1%) (99% - 101%)
WP		
Time		
Temp °C		
Reading (mS/cm)		

Sampler Signature/Date:

[Signature] 11-1-24

Supervisor Review/Date:

[Signature] 11/1/24

Project Name: Parisi, Penny Westwater
04/24/2024

Project Name: quarctely 2023

Project Location: East 1st Ave

Cooler Custody Seal: 2 A

Denaturation Time:

Temperature Correction Factor ($^{\circ}\text{C}$): +3

Sampling Location	Date/Time of sampling	Field Measurements			
		Date/Time of Analysis	pH	Temperature °C	Specific Conductance (mS/cm) (99%-101%)
CCV C3071D	1445 11-1-24	14418 11-1-24	7.00	18.75°	N/A
Q4 wastewater	1455	1456	7.09	21.20°	
Duf	1457	1458	7.10	21.22°	
CCV C3071D	1500	1502	7.00	18.77°	

11/12



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

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488