

DATA PACKAGE

GENERAL CHEMISTRY
METALS

PROJECT NAME : PARSIPPANY WASTEWATER QUARTERLY 2024

METEM A GE POWER BUSINESS

700 Parsippany Road

Parsippany, NJ - 07054

Phone No: 973-887-6635

ORDER ID : P4681

ATTENTION : Sundas Pervez



Laboratory Certification ID # 20012



1) Signature Page	3
2) Case Narrative	4
2.1) Metals-AES- Case Narrative	4
2.2) Genchem- Case Narrative	5
3) Qualifier Page	6
4) QA Checklist	7
5) Metals-AES Data	8
6) Genchem Data	12
7) Shipping Document	16
7.1) CHAIN OF CUSTODY	17
7.2) Lab Certificate	20

1

2

3

4

5

6

7

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



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

CASE NARRATIVE

METEM A GE POWER Business

Project Name: Parsippany Wastewater Quarterly 2024

Project # N/A

Chemtech Project # P4681

Test Name: Metals Group5

A. Number of Samples and Date of Receipt:

2 Water samples were received on 11/01/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, Field pH and Metals Group5. This data package contains results for Metals Group5.

C. Analytical Techniques:

The analysis and digestion of Metals Group5 was based on method 200.7.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (Q4-WWMS) analysis met criteria for all samples except for Cadmium due to Chemical interference during Digestion Process.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

P4681-01+QC Report Straight 25X Dilution for all elements due to presence of contaminants in the samples and very high presence of Sodium in the sample. Without minimum 25X dilution this sample is not able to analyze.

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

Signature_____



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

CASE NARRATIVE

METEM A GE POWER Business

Project Name: Parsippany Wastewater Quarterly 2024

Project # N/A

Chemtech Project # P4681

Test Name: Cyanide,Field pH

A. Number of Samples and Date of Receipt:

2 Water samples were received on 11/01/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested:

Cyanide, Field pH and Metals Group5. This data package contains results for

Cyanide,Field pH.

C. Analytical Techniques:

The analysis of Cyanide was based on method SM4500-CN C,E and The analysis of Field pH was based on method SM4500-H B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

E. Additional Comments:

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

Signature_____

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: SOHIL JODHANI

Date: 11/20/2024

Hit Summary Sheet SW-846

SDG No.:	P4681	Order ID:	P4681
Client:	METEM A GE POWER Business	Project ID:	Parsippany Wastewater Quarterly 2024

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : Q4-WW								
P4681-01	Q4-WW	Water	Chromium	29.0	JD	13.0	125	ug/L
P4681-01	Q4-WW	Water	Nickel	193	JD	32.0	500	ug/L
P4681-01	Q4-WW	Water	Zinc	58.5	JD	36.0	500	ug/L



SAMPLE DATA

Report of Analysis

Client:	METEM A GE POWER Business	Date Collected:	11/01/24
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
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-43-9	Cadmium	5.25	UDN25	5.25		75.0	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7440-47-3	Chromium	29.0	JD 25	13.0		125	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7440-50-8	Copper	38.0	UD 25	38.0		250	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7439-92-1	Lead	39.3	UD 25	39.3		150	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7440-02-0	Nickel	193	JD 25	32.0		500	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7440-22-4	Silver	20.8	UD 25	20.8		125	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	
7440-66-6	Zinc	58.5	JD 25	36.0		500	ug/L	11/04/24 11:30	11/08/24 22:24	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group5			

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

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

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	Metals Group5	200.7	11/01/24	11/04/24	11/08/24	11/01/24



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

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	



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

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

Client Name: Metem Affairs BusinessClient Address: 700 Pat Si Appany RdClient Rep on Site: Sundas PerezSampling Date: 11-1-24Departure Time: 1430Arrival Time: 1430FIELD EQUIPMENT CALIBRATION ($\pm 1\%$) (99%-101%)pH Calibration ($\pm 1\%$) (99%-101%) (SM4500-H B/9040C)ICV
(± 0.1 pH unit)

Calibration ($\pm 1\%$) (99%-101%)		ICV	
7.00 Buffer	4.00 Buffer	10.00 Buffer	7.00 Buffer
W 3071	W 3107	W 3094	W 3093
1433	1436	1438	1440
17.79°C	18.17°C	18.53°C	18.32°C
Temp °C	4.00	10.00	7.00
pH	7.00		

FIELD EQUIPMENT CALIBRATION ($\pm 1\%$) (99%-101%)

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

ICV ($\pm 1\%$) (99%-101%)

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

Sampler Signature/Date:

 11-1-24

Supervisor Review/Date:

 11/1/24

Project Name: Participatory water user committee

Project Name: Participatory watershed

Project Location: 005-000000

Cooler Custody Seal: 2/A

Temperature Correction Factor (°C): +3

Arrival Time:	1430	Departure Time:	
---------------	------	-----------------	--

Sampling Location

Date/Time of
sampling

Date/Time of Analysis

pH

Temperature
°C

Specific Conductance
(mS/cm) (99% -101%)

CCV C3071

1445 11-26

11-1-24 14718

7.00

18.75

2/4

Q4 wastewater

1755

9571

7.09

21.20

Dr

1457

1458

--	--

7.10

21.22

CCV C30717

1500

1502

1

7.00

18.77c

T

Meter: YSI MPS, Model # 556, Serial # 085A0063

Sampler Signature/Date:

111221

Supervisor Review/Date:

11/2

OA Control# A3041241

Page 90

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