

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



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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 : N. N. Pandya

APPROVED

Date: 11/20/2024
By Nimisha Pandya, QA/QC Supervisor at 10:02 am, Nov 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 N. N. Pandya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:03 am, Nov 20, 2024



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 N. N. Pandya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 10:03 am, Nov 20, 2024

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 Custody

✓

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

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: Metem AGE Power Business

PROJECT NAME: Parsippany Wastewater Quarterly 2024

BILL TO: _____ PO#: _____

ADDRESS: 700 Parsippany Road,

PROJECT NO.: _____ LOCATION: _____

ADDRESS: _____

CITY: Parsippany STATE: NJ ZIP: 07054

PROJECT MANAGER: _____

CITY _____ STATE: _____ ZIP: _____

ATTENTION: Sundas Pervez

e-mail: _____

ATTENTION: _____ PHONE: _____

PHONE: 862-289-2531 FAX: _____

PHONE: _____ FAX: _____

ANALYSIS

DATA TURNAROUND INFORMATION

DATA DELIVERABLE INFORMATION

FAX (RUSH) _____ DAYS*

HARDCOPY (DATA PACKAGE): _____ DAYS*

EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

- ☐ 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

1 2 3 4 5 6 7 8 9
B D E E
← Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

1.

Q4 Wastewater

W

✓

11-24 1455

4

✓ ✓ ✓ ✓ ✓

2.

3.

4.

5.

6.

7.

8.

9.

10.

PH 7.9

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

RELINQUISHED BY SAMPLER:

DATE/TIME: 1500

RECEIVED BY:

1500

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.0 °C

1. [Signature]

DATE/TIME: 11-24

RECEIVED BY: [Signature]

11-24

RELINQUISHED BY SAMPLER:

DATE/TIME: _____

RECEIVED BY: _____

2. [Signature]

DATE/TIME: _____

RECEIVED BY: _____

RELINQUISHED BY SAMPLER:

DATE/TIME: 1615

RECEIVED BY: _____

11-1-24

Page _____ of CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ 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	
7.00	4.00	10.00	7.00	
Time				
Temp °C				
pH				

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%)

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

Sampler Signature/Date:

[Signature] 11-1-24

Supervisor Review/Date:

[Signature] 11/1/24

Project Name: Participatory water meter

Participatory water user

Part 5 - 60 min

24

+	
2	

Imperial College Collection (C). _____

Field Measurements

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	1448 11-1-24	7.00	18.75°	N/A
Q4 wastewater	1455	1456	7.09	21.20°	I
DuP	1457	1458	7.10	21.22°	
CCV C3071D	1500	1502	7.00	18.77°	I

11/1/20

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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