

## **DATA PACKAGE**

METALS

**PROJECT NAME : NJUC RESIDENTIAL WATER QUALITY TESTING**

**XIN NIE**

**522 23 St**

**Union City, NJ - 07087**

**Phone No: 202-642-7211**

**ORDER ID : Q2785**

**ATTENTION : Xin Nie**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** Q2785

**Project ID :** NJUC residential water quality testing

**Client :** Xin Nie

**Lab Sample Number**

Q2785-01

**Client Sample Number**

WATER

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: 8/13/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

**Xin Nie**

**Project Name: NJUC residential water quality testing**

**Project # N/A**

**Order ID # Q2785**

**Test Name: Mercury, Metals ICP-TAL**

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

1 Water samples were received on 08/06/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals ICP-TAL and METALS-TAL. This data package contains results for Mercury, Metals ICP-TAL.

### **C. Analytical Techniques:**

The analysis and digestion of Metals ICP-TAL was based on 200.7 and The analysis and digestion of Mercury was based on 245.1.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike analysis met criteria for all compounds.

The Matrix Spike Duplicate (EFF-WASTE WATERMSD) analysis met criteria for all compounds except for Magnesium, Potassium and Zinc due to Chemical Interference during Digestion Process.

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:**

The Post Digest Spike (POWDERA) analysis met criteria for all compounds except for Potassium due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

The Date and time of sampling was not listed in the COC.

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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:

<b>J</b>	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).
<b>U</b>	Indicates the analyte was analyzed for, but not detected.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>E</b>	Indicates the reported value is estimated because of the presence of interference
<b>M</b>	Indicates Duplicate injection precision not met.
<b>N</b>	Indicates the spiked sample recovery is not within control limits.
<b>S</b>	Indicates the reported value was determined by the Method of Standard Addition (MSA).
<b>*</b>	Indicates that the duplicate analysis is not within control limits.
<b>+</b>	Indicates the correlation coefficient for the MSA is less than 0.995.
<b>D</b>	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	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
<b>OR</b>	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements
<b>H</b>	Sample Analysis Out Of Hold Time

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q2785

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: 08/13/2025

**Hit Summary Sheet**  
**SW-846**

<b>SDG No.:</b>	Q2785	<b>Order ID:</b>	Q2785
<b>Client:</b>	Xin Nie	<b>Project ID:</b>	NJUC residential water quality testing

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID : WATER</b>								
Q2785-01	WATER	Water	Aluminum	84.1		15.4	50.0	ug/L
Q2785-01	WATER	Water	Barium	46.6	J	9.75	50.0	ug/L
Q2785-01	WATER	Water	Cadmium	0.77	J	0.31	3.00	ug/L
Q2785-01	WATER	Water	Calcium	28600		86.4	1000	ug/L
Q2785-01	WATER	Water	Copper	6.75	J	1.89	10.0	ug/L
Q2785-01	WATER	Water	Iron	34.8	J	18.0	50.0	ug/L
Q2785-01	WATER	Water	Lead	26.8		1.21	6.00	ug/L
Q2785-01	WATER	Water	Magnesium	5880		104	1000	ug/L
Q2785-01	WATER	Water	Manganese	12.7		2.46	10.0	ug/L
Q2785-01	WATER	Water	Nickel	2.48	J	1.90	20.0	ug/L
Q2785-01	WATER	Water	Potassium	1740		309	1000	ug/L
Q2785-01	WATER	Water	Sodium	57800		367	1000	ug/L
Q2785-01	WATER	Water	Zinc	441		2.00	20.0	ug/L





# SAMPLE DATA

## Report of Analysis

Client:	Xin Nie	Date Collected:	08/05/25
Project:	NJUC residential water quality testing	Date Received:	08/06/25
Client Sample ID:	WATER	SDG No.:	Q2785
Lab Sample ID:	Q2785-01	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.
7429-90-5	Aluminum	84.1		1	15.4	50.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-36-0	Antimony	2.72	U	1	2.72	25.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-38-2	Arsenic	1.85	U	1	1.85	10.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-39-3	Barium	46.6	J	1	9.75	50.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-41-7	Beryllium	0.27	U	1	0.27	3.00	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-43-9	Cadmium	0.77	J	1	0.31	3.00	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-70-2	Calcium	28600		1	86.4	1000	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-47-3	Chromium	0.53	U	1	0.53	5.00	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-48-4	Cobalt	1.16	U	1	1.16	15.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-50-8	Copper	6.75	J	1	1.89	10.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7439-89-6	Iron	34.8	J	1	18.0	50.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7439-92-1	Lead	26.8		1	1.21	6.00	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7439-95-4	Magnesium	5880	N	1	104	1000	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7439-96-5	Manganese	12.7		1	2.46	10.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7439-97-6	Mercury	0.027	U	1	0.027	0.20	ug/L	08/12/25 13:50	08/12/25 18:01	E245.1	
7440-02-0	Nickel	2.48	J	1	1.90	20.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-09-7	Potassium	1740	N	1	309	1000	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7782-49-2	Selenium	2.52	U	1	2.52	10.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-22-4	Silver	0.81	U	1	0.81	5.00	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-23-5	Sodium	57800		1	367	1000	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-28-0	Thallium	2.51	U	1	2.51	20.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-62-2	Vanadium	2.49	U	1	2.49	20.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	
7440-66-6	Zinc	441	N	1	2.00	20.0	ug/L	08/11/25 12:55	08/12/25 13:20	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	METALS-TAL			

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:	Q2785	OrderDate:	8/6/2025 11:37:24 AM
Client:	Xin Nie	Project:	NJUC residential water quality testing
Contact:	Xin Nie	Location:	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2785-01	WATER	Water			08/05/25			08/06/25
			Mercury	245.1		08/12/25	08/12/25	
			Metals ICP-TAL	200.7		08/11/25	08/12/25	



# SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside, NJ 07092  
(908) 789-8900 Fax: (908) 788-9222  
www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number: Q2785

COC Number:

CLIENT INFORMATION		PROJECT INFORMATION				BILLING INFORMATION													
COMPANY: Xin Nie		PROJECT NAME:				BILL TO:					PO#								
ADDRESS: 522 23 St		PROJECT #:		LOCATION:		ADDRESS:													
CITY Union City STATE: NJ ZIP:07087		PROJECT MANAGER:				CITY:					STATE: ZIP:								
ATTENTION: Xin Nie		E-MAIL:				ATTENTION:					PHONE:								
PHONE: FAX:		PHONE: FAX:				<b>ANALYSIS</b>													
<b>DATA TURNAROUND INFORMATION</b>		<b>DATA DELIVERABLE INFORMATION</b>				<b>PRESERVATIVES</b>										<b>COMMENTS</b>			
FAX: _____ DAYS* HARD COPY: _____ DAYS* EDD _____ DAYS* * TO BE APPROVED BY ALLIANCE STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		<input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____ <input type="checkbox"/> EDD Format _____																	
<b>CHEMTECH SAMPLE ID</b>	<b>PROJECT SAMPLE IDENTIFICATION</b>	<b>SAMPLE MATRIX</b>	<b>SAMPLE TYPE</b>		<b>SAMPLE COLLECTION</b>		# of Bottles											<-- Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9			
1.	Water			X			1	X											
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY</b>																			
RELINQUISHED BY SAMPLER		DATE/TIME		RECEIVED BY		Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <u>3.0</u> MeOH extraction requires an additional 4oz. Jar for percent solid <input type="checkbox"/> Ice in Cooler?: _____													
1.				1.		Comments:													
RELINQUISHED BY		DATE/TIME		RECEIVED BY															
2.				2.															
RELINQUISHED BY		DATE/TIME		RECEIVED FOR LAB BY		Page _____ of _____		SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight ALLIANCE: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight										<b>Shipment Complete</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	
3.				3.															
WHITE - ALLIANCE COPYFOR RETURN TO CLIENT    YELLOW - ALLIANCE COPY    PINK - SAMPLER COPY																			

### 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