

# **DATA PACKAGE**

GENERAL CHEMISTRY METALS

PROJECT NAME : AEC-2025-0013- CSC 4016 MADISON

**ATG-GREENVILLE AEC** 

426 Fairforest way

Greenville, SC - 29607

Phone No: 864-704-7984

ORDER ID: Q2293 ATTENTION: Daniel Maalouf



Laboratory Certification ID # 20012





1) Signature Page						
2) Case Narrative	4					
2.1) Metals-AES- Case Narrative	4					
2.2) Genchem- Case Narrative	5					
3) Qualifier Page	7					
4) QA Checklist	8					
5) Metals-AES Data	9					
6) Genchem Data	13					
7) Shipping Document	16					
7.1) CHAIN OF CUSTODY	17					
7.2) Lab Certificate	18					



# **Cover Page**

- **Order ID :** Q2293
- Project ID : AEC-2025-0013- CSC 4016 Madison
  - **Client :** ATG-GREENVILLE AEC

#### Lab Sample Number

Client Sample Number

Q2293-01

SW-3

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: 6/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

# CASE NARRATIVE

2.1

ATG-GREENVILLE AEC Project Name: AEC-2025-0013- CSC 4016 Madison Project # N/A Order ID # Q2293 Test Name: Metals ICP-Group1

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

1 Water sample was received on 06/11/2025.

#### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: Anions Group1, COD, Metals ICP-Group1, Oil and Grease, pH, Phosphorus-Total, TKN and TSS. This data package contains results for Metals ICP-Group1.

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

The analysis and digestion of Metals ICP-Group1 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 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. The Serial Dilution met the acceptable 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\_\_\_\_\_



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

# CASE NARRATIVE

2.2

ATG-GREENVILLE AEC Project Name: AEC-2025-0013- CSC 4016 Madison Project # N/A Order ID # Q2293 Test Name: Anions Group1,COD,Oil and Grease,pH,Phosphorus-Total,TKN,TSS

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

1 Water sample was received on 06/11/2025.

#### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: Anions Group1, COD, Metals ICP-Group1, Oil and Grease, pH, Phosphorus-Total, TKN and TSS. This data package contains results for Anions Group1,COD,Oil and Grease,pH,Phosphorus-Total,TKN,TSS.

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

The analysis of Oil and Grease was based on method 1664A, The analysis of Anions Group1 was based on method 300.0, The analysis of Phosphorus-Total was based on method 365.3, The analysis of pH was based on method 9040C, The analysis of TSS was based on method SM2540 D, The analysis of TKN was based on method SM4500 N Org B or C and The analysis of COD was based on method SM5220 D.

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

The Holding Times were met for all samples except for SW-3 of pH, as this sample received out of holding time.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (LAW-25-0084MS) analysis met criteria for all samples except for TKN due to matrix interference.

The Matrix Spike Duplicate (LAW-25-0084MSD) analysis met criteria for all samples except for TKN due to matrix interference.

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

#### **E. Additional Comments:**

As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project.

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.

2 2.2

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										
Ε	Indicates the reported value is estimated because of the presence of interference										
Μ	Indicates Duplicate injection precision not met.										
Ν	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 OR	<ul> <li>Method qualifiers</li> <li>"P" for ICP instrument</li> <li>"PM" for ICP when Microwave Digestion is used</li> <li>"CV" for Manual Cold Vapor AA</li> <li>"AV" for automated Cold Vapor AA</li> <li>"CA" for MIDI-Distillation Spectrophotometric</li> <li>"AS" for Semi – Automated Spectrophotometric</li> <li>"C" for Manual Spectrophotometric</li> <li>"T" for Titrimetric</li> <li>"NR" for analyte not required to be analyzed</li> <li>Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.</li> </ul>										
Q	Indicates the LCS did not meet the control limits requirements										
Н	Sample Analysis Out Of Hold Time										



#### APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

Project #: Q2293

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)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	<u>✓</u>
Is the chain of custody signed and complete	
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<u>✓</u>
Collect information for each project id from server. Were all requirements followed	<u>✓</u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u>✓</u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u>✓</u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u>✓</u>
Do requested analyses on Chain of Custody agree with the log-in page	<u>✓</u>
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓ ✓ ✓
Were the samples received within hold time	<u>✓</u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u>✓</u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	
All runlogs and manual integration are reviewed for requirements	<u>✓</u>
All manual calculations and /or hand notations verified	<u>✓</u>

QA Review Signature: SOHIL JODHANI



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

#### Hit Summary Sheet SW-846

SDG No.: Client:	Q2293 ATG-GREENVILLE AEC					Q2293 AEC-2025-001	13- CSC 4016 Madison
Sample ID	Client ID	Matrix	Parameter	Concentration	С	MDL	RDL Units
Client ID :	SW-3						
Q2293-01	SW-3	Water	Copper	7.62	J	1.89	10.0 ug/L
Q2293-01	SW-3	Water	Lead	2.30	J	1.21	6.00 ug/L
Q2293-01	SW-3	Water	Zinc	34.1		1.60	20.0 ug/L

B C

D





5

A B C D



7439-92-1 Lead

7440-66-6 Zinc

ug/L

ug/L

06/12/25 12:15 06/17/25 14:59 EPA 200.7 E200.7

06/12/25 12:15 06/17/25 14:59 EPA 200.7 E200.7

## **Report of Analysis**

						Re	POILOIA	liarysis					В	
Client: ATG-GREENVILLE AEC								Date Collected: 06/10/25						
Project:	Project: AEC-2025-0013- CSC 4016 Madison								Date Received	. 06/1	1/25		D	
Client Sa	Client Sample ID: SW-3								SDG No.:	SDG No.: Q2293				
Lab Sam	Sample ID: Q2293-01					Matrix:	Matrix: Water							
Level (lo	ow/med):	low							% Solid:	0			J	
Cas	Parameter	Conc.	Qua.	DF	MDL	]	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met	<u>.                                    </u>	
7440-50-8	Copper	7.62	J	1	1.89		10.0	ug/L	06/12/25 12:15	06/17/25 14:59	EPA 200.7	7 E200.7		

6.00

20.0

1.21

1.60

2.30

34.1

J 1

1

Color Before:	Colorless	Clarity Before:	Clear	Texture:								
Color After:	Colorless	Clarity After:	Clear	Artifacts:								
Comments:	Metals ICP-Group1											
U = Not Detec	eted			J = Estimated Value								
LOQ = Limit o	of Quantitation			B = Analyte Found in Associated Method Blank								
MDL = Metho	d Detection Limit			* = indicates the duplicate analysis is not within control limits.								
LOD = Limit of	of Detection			E = Indicates the reported value is estimated because of the presence								
D = Dilution				of interference.								
Q = indicates I	LCS control criteria did not me	et requirements		OR = Over Range								
				N =Spiked sample recovery not within control limits								
Q2293			11 c	of 18								



5

A B C D

# LAB CHRONICLE

OrderID: Client: Contact:	Q2293 ATG-GREENVILLE AEC Daniel Maalouf		F		OrderDate:         6/11/2025 12:36:36 PM           Project:         AEC-2025-0013- CSC 4016 Madison           Location:         A12						
LabID	ClientID Matrix Test		Test	Method	Sample Date	Prep Date	Anal Date	Received			
Q2293-01	Q2293-01 SW-3				06/10/25			06/11/25			
			Metals ICP-Group1	200.7		06/12/25	06/17/25				





6

В



#### **Report of Analysis**

Client:	ATG-GREENVILLE AEC	Date Collected:	06/10/25 12:05
Project:	AEC-2025-0013- CSC 4016 Madison	Date Received:	06/11/25
Client Sample ID:	SW-3	SDG No.:	Q2293
Lab Sample ID:	Q2293-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Nitrite	0.088	J	1	0.074	0.60	mg/L		06/11/25 10:52	300.0
Nitrate	0.32	J	1	0.095	0.50	mg/L		06/11/25 10:52	300.0
Nitrate+Nitrite	0.41	J	1	0.17	1.10	mg/L		06/11/25 10:52	300.0
COD	40.8		1	1.50	10.0	mg/L		06/12/25 14:23	SM 5220 D-11
Oil and Grease	0.30	J	1	0.29	5.00	mg/L		06/17/25 09:30	1664A
pН	7.31	Н	1	0	0	pН		06/12/25 09:40	9040C
Phosphorus, Total	0.21		1	0.0050	0.050	mg/L	06/13/25 09:45	06/13/25 13:29	365.3
TKN	1.10		1	0.11	0.50	mg/L	06/12/25 08:50	06/16/25 15:53	SM4500-N Org
									C-11 plus NH3
									B plus G-11
TSS	235		1	1.00	4.00	mg/L		06/13/25 10:00	SM 2540 D-15

Comments: pH result reported at temperature 20.3 °C

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

В



# A B C

6

OrderID: Client: Contact:	Q2293 ATG-GREENVILLE AEC Daniel Maalouf			OrderDate: Project: Location:	6/11/2025 12:3 AEC-2025-001 A12		ladison	
LabID	ClientID	ClientID Matrix Test		Method	Sample Date	Prep Date	Anal Date	Received
Q2293-01	SW-3	WATER			06/10/25 12:05			06/11/25
			Anions Group1	300.0			06/11/25	
			COD	SM5220 D			10:52 06/12/25 14:23	
			Oil and Grease	1664A			06/17/25 09:30	
			рН	9040C			06/12/25 09:40	
			Phosphorus-Total	365.3		06/13/25	06/13/25 13:29	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11	Org C-11 plus NH3 B plus		06/16/25 15:53	
			TSS	SM2540 D			06/13/25 10:00	



# <u>SHIPPING</u> DOCUMENTS

7

	CAL GROU	(908) 789-8900    F	Mountainside, NJ 07092 Fax: (908) 788-9222 emtech.net RECORD				Alliance Project Number: AEC-2025-0013 COC Number:												
112-122	CLIENT INFORM	ATION	122	PRO	JECT	INFO	RMATIC	ON		BILLING INFORMATION									
COMPANY: Durhan				PROJECT NAME: CSC							BILL TO:candice.caviness@alliancetg.com PO#								the second s
ADDRESS: 82 Nath				PROJECT #:AEC-2025							ADDRESS:								
CITY Madison	STATE:	PROJECT MANAGER:	र:													STAT	TE: ZIP:		
ATTENTION:	daniel.maalouf@	alliance	tg.com	E-MAIL:						ATTENTION: PHONE:									NE:
PHONE:	FAX:			PHONE:864-704-7984			FAX:				_		AN	ALY	SIS	1.0	1		
DATA	TURNAROUND IN	NFORM/	ATION	DATA DEL	IVER/	ABLE	INFOR	MATION	19							as			
FAX: DAYS* HARD COPY: DAYS* EDD DAYS* * TO BE APPROVED BY ALLIANCE STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			RESEULTS ONLY     RESULTS + QC     New Jersey REDUC     New Jersey CLP				P State ASP "E tate ASP "A		000 1	Total OG	Hd 3	SSI 4	G Total Phos	9 TKN	- Nitrate Nitrogen	° Cu, pb, zn	9	-	
	,			EDD Format					-	-	- 1.2	F	RES	ERVA	TIVE	S		2.7	COMMENTS
CHEMTECH SAMPLE ID	PI SAMPLE I	ROJECT	CATION	SAMPLE MATRIX	SAMPLE TYPE dwoo			MPLE ECTION TIME	# of Bottles	1	2	3 4	4	5	6	7	8	9	< Specify Preservatives A-HCI B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other
1.	SW-3			SW		x	6/10/25	12:05	5	1	1	1	1	1	1	1	1		
2.																			
3.																			
4.																			
5.																			
6.																	_		
7.																			
8.																			
9. 10.																			
10.																			
-2 (		DY MU	ST BE DOCUM	ENTED BELOW E	ACH	TIME	SAMP	LES CH	ANGE	PRO	SSE	SSIO	N IN	CLUI	DING	COL	JRIE	R DE	ELIVERY
RELINQUISHED BY SAMPLER     DATE/TIME     RECEIVED BY       1. Daniel Maalouf ATG     1.       RELINQUISHED BY     DATE/TIME       2.     DATE/TIME       2.     1.					Conditions of bottles or coolers at receipt:       Compliant       Non Compliant       Cooler Temp       3_0         MeOH extraction requires an additional 4oz. Jar for percent solid       Ice in Cooler?:														
RELINQUISHED BY DATE/TIME RECEIVED FOR DB BY 3. 3. 3.						Pageof     ALLIANCE:     Picked Up     Overnight     YES						Shipment Complete							
		V	WHITE - ALLIANCE	COPYFOR RETURN	TO CL	IENT	YELLO	ow - Alli/	ANCE C	0PY	PIN	<b>K</b> - S/	AMPLE	ER CC	PY				

Q2293

7 7.1



#### 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