

DATA PACKAGE

GENERAL CHEMISTRY

PROJECT NAME : CENTRAL WASTEWATER TREATMENT FACILITY 2025

SCIENTIFIC DESIGN

49 Industrial Avenue

Little Ferry, NJ - 07643

Phone No: 2016410500

ORDER ID : Q2835

ATTENTION : Brent Inkelaar



Laboratory Certification ID # 20012



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DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name : Alliance Technical Group LLC Client : Scientific Design

Project Location : NJ Project Number : Central Wastewater Treatment Facility 2025

Laboratory Sample ID(s) : Q2835 Sampling Date(s) : 8/12/2025

List DKQP Methods Used (e.g., 8260,8270, et Cetra) **SM2540 D,SM2550-B,SM4500-H B,SM5210 B,SM5220 D,SOP**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? b)Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was “No” (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is “No”, the data package does not meet the requirements for “Data of Known Quality.”

Cover Page

Order ID : Q2835

Project ID : Central Wastewater Treatment Facility 2025

Client : Scientific Design

Lab Sample Number

Q2835-01
Q2835-02

Client Sample Number

Manufacturing
Pilot Plant

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 :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:35 pm, Sep 04, 2025

Date: 8/20/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Scientific Design

Project Name: Central Wastewater Treatment Facility 2025

Project # N/A

Order ID # Q2835

Test Name: BOD5,COD,Field pH,Field Temperature,TSS

A. Number of Samples and Date of Receipt:

2 Water samples were received on 08/12/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: BOD5,COD,Field pH,Field Temperature,TSS. This data package contains results for BOD5,COD,Field pH,Field Temperature,TSS.

C. Analytical Techniques:

The analysis of TSS was based on method SM2540 D, The analysis of Field Temperature was based on method SM2550-B, The analysis of Field pH was based on method SM4500-H B, The analysis of BOD5 was based on method SM5210 B and The analysis of COD was based on method SM5220 D.

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 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 _____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:35 pm, Sep 04, 2025

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 #: Q2835

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: 08/20/2025



SAMPLE DATA

Report of Analysis

Client:	Scientific Design	Date Collected:	08/12/25 10:08
Project:	Central Wastewater Treatment Facility 2025	Date Received:	08/12/25
Client Sample ID:	Manufacturing	SDG No.:	Q2835
Lab Sample ID:	Q2835-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
BOD5	0.20	U	1	0.20	2.00	mg/L		08/14/25 09:50	SM 5210 B-16
COD	1.50	U	1	1.50	10.0	mg/L		08/15/25 11:03	SM 5220 D-11
Field pH	7.18		1	0	0	pH		08/12/25 10:30	SM4500-H B
Field Temperature	49.8		1	0	0	o C		08/12/25 10:30	SM 2550 B-10
TSS	60.3		1	1.00	4.00	mg/L		08/15/25 10:00	SM 2540 D-20

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

A

B

C

Client:	Scientific Design	Date Collected:	08/12/25 10:21
Project:	Central Wastewater Treatment Facility 2025	Date Received:	08/12/25
Client Sample ID:	Pilot Plant	SDG No.:	Q2835
Lab Sample ID:	Q2835-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
BOD5	481		1	0.20	2.00	mg/L		08/14/25 09:50	SM 5210 B-16
Field pH	6.52		1	0	0	pH		08/12/25 10:38	SM4500-H B
Field Temperature	34.8		1	0	0	o C		08/12/25 10:38	SM 2550 B-10
TSS	1.00	U	1	1.00	4.00	mg/L		08/15/25 10:00	SM 2540 D-20

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: Q2835	OrderDate: 8/12/2025 11:33:54 AM
Client: Scientific Design	Project: Central Wastewater Treatment Facility 2025
Contact: Brent Inkelaar	Location: J21

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2835-01	Manufacturing	WATER			08/12/25			08/12/25
					10:08			
			BOD5	SM5210 B		08/14/25		
						09:50		
			COD	SM5220 D		08/15/25		
						11:03		
			Field pH	SM4500-H B		08/12/25		
						10:30		
			Field Temperature	SM2550-B		08/12/25		
						10:30		
			TSS	SM2540 D		08/15/25		
						10:00		
Q2835-02	Pilot Plant	WATER			08/12/25			08/12/25
					10:21			
			BOD5	SM5210 B		08/14/25		
						09:50		
			Field pH	SM4500-H B		08/12/25		
						10:38		
			Field Temperature	SM2550-B		08/12/25		
						10:38		
			TSS	SM2540 D		08/15/25		
						10:00		



SHIPPING DOCUMENTS

CLIENT INFORMATION

CLIENT PROJECT INFORMATION

CLIENT BILLING INFORMATION

REPORT TO BE SENT TO:

COMPANY: **Scientific Design**
 ADDRESS: **49 Industrial Ave**
 CITY: **Little Ferry** STATE: **NJ** ZIP: **07643**
 ATTENTION: **Brent Inkelaar**
 PHONE: **201-641-0500** FAX:

PROJECT NAME: **Central Wastewater Treatment Facility 2025**
 PROJECT NO.: LOCATION:
 PROJECT MANAGER:
 e-mail:
 PHONE: FAX:

BL TO: PO#:
 ADDRESS:
 CITY STATE: ZIP:
 ATTENTION: PHONE:

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 + Raw Data) NYS ASP A NYS ASP B
 EDD FORMAT Other _____

COD
BOD5
TSS
Field Sampling
Field PH

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER		
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9			
1.	Manufacturing	W	✓	✓	8-12-25	1008	5	C	E	E	E	E							PH 7.18
2.	Pilot plant	W	✓	✓	8-12-25	1021	4		✓	✓	✓	✓							PH 6.52
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: **1. Rachel Reur** DATE/TIME: **8-12-25 1052** RECEIVED BY: **[Signature]** DATE/TIME: **8-12-25 1052**
 Conditions of bottles or coolers at receipt: COMPLIANT NON COMPLIANT COOLER TEMP **3.0** °C
 Comments: _____
 RELINQUISHED BY SAMPLER: _____ DATE/TIME: _____ RECEIVED BY: _____
 RELINQUISHED BY SAMPLER: **[Signature]** DATE/TIME: **8-12-25 1414** RECEIVED BY: **[Signature]** DATE/TIME: _____
 CLIENT: Hand Delivered Other Shipments Complete
 YES NO

FIELD SAMPLING LOG

Client Name: Scientific Design

Project Name: Central Wastewater Treatment Facility 2025

Client Address: 49 Industrial Ave

Project Location: Little Ferry

Client Rep on Site: Brent Inkelaar

Cooler Custody Seal: N/A

Sampling Date: 8-12-25







Temperature Correction Factor (°C): 0

Arrival Time: 0947 Departure Time: 1052

FIELD EQUIPMENT CALIBRATION

pH Calibration (SM4500-H B/9040C)				
Calibration				ICV (± 0.1 pH unit)
	7.00 Buffer	4.00 Buffer	10.00 Buffer	7.00 Buffer
	W 3217	W 3178	W 3191	W 3093
Time	0948	0950	0952	0954
Temp °C	20.4°	20.7°	20.6°	20.5°
pH	7.01	4.00	10.05	7.02

FIELD EQUIPMENT CALIBRATION

Specific Conductance (mS/cm) (99% -101%)/(mmho/cm) (SM2510 B/120.1/9050A)		
Calibration (± 1%) (99% -101%)		ICV (± 1%) (99% -101%)
	WP	WP
Time		
Temp °C		
Reading (mS/cm)		

Sampler Signature/Date:  8-12-25

Supervisor Review/Date: _____

Alliance Technical Group, LLC-Newark

284 Sheffield Street, Mountainside, NJ 07092 Tel. 908-789-8900 Fax 908-789-8922

FIELD SAMPLING LOG

Client Name: Scientific Design

Project Name: Central Wastewater Treatment Facility 2025

Client Address: Brent 49 Industrial Ave

Project Location: Little Ferry

Client Rep on Site: Brent Inkelaar

Cooler Custody Seal: N/A

Sampling Date: 8-12-25


Temperature Correction Factor (°C): 0

Arrival Time: 0947 Departure Time: 1052

FIELD SAMPLING INFORMATION

Sampling Location	Date/Time of sampling	Field Measurements			
		Date/Time of Analysis	pH	Temperature °C	Specific Conductance (mS/cm) (99% -101%)
CCV CW3093)	8-12-25 1023	8-12-25 1025	7.00	20.8 ^c	
Manufacturing	10:08 ³⁰ 1028	1030	7.18	49.8 ^c	
DUP	1032	1034	7.17	49.9 ^c	
Pilot Plant	10:41 ³⁰ 1036	1038	6.52	34.8 ^c	
DUP	1040	1042	6.53	34.9 ^c	
CCV CW3093)	1044	1046	7.00	20.7 ^c	

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

Sampler Signature/Date:  8-12-25

Supervisor Review/Date: _____

6
6.1

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