

## **DATA PACKAGE**

GENERAL CHEMISTRY

**PROJECT NAME : CARRIER POST-TREATMENT**

**SCIENTIFIC DESIGN**

**49 Industrial Avenue**

**Little Ferry, NJ - 07643**

**Phone No: 2016410500**

**ORDER ID : Q3094**

**ATTENTION : Emily Chen**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** Q3094

**Project ID :** Carrier Post-Treatment

**Client :** Scientific Design

**Lab Sample Number**

Q3094-01  
Q3094-02  
Q3094-03  
Q3094-04

**Client Sample Number**

5670-18-000F  
5674-08-001W  
5674-08-001WP  
5674-11-001C

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.

**APPROVED**

Signature : \_\_\_\_\_ *By Nimisha Pandya, QA/QC Supervisor at 11:44 am, Sep 23, 2025*

Date: 9/23/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

### **Scientific Design**

**Project Name: Carrier Post-Treatment**

**Project # N/A**

**Order ID # Q3094**

**Test Name: BOD5,TOC**

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

4 Water samples were received on 09/12/2025.

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

According to the Chain of Custody document, the following analyses were requested: BOD5,TOC. This data package contains results for BOD5,TOC.

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

The analysis of TOC was based on method 9060A and The analysis of BOD5 was based on method SM5210 B.

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

The Holding Times were met for all analysis.

Sample 5670-18-000F was diluted due to high concentrations for TOC & Sample 5674-08-001W was diluted due to high concentrations for TOC & Sample 5674-08-001WDL was diluted due to high concentrations for TOC & Sample 5674-11-001C was diluted due to high concentrations for TOC.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike (5674-11-001CMS) analysis met criteria for all compounds except for TOC due to matrix interference.

The Matrix Spike Duplicate (5674-11-001CMSD) analysis met criteria for all compounds except for TOC due to matrix interference.

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

The Calibration met the requirements.

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

For TOC samples Q3094-02 and Q3094-03 reported with straight dilution due to sample were expected to be highly concentrated.

The date and time of sampling were not listed in the COC.



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.

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 11:45 am, Sep 23, 2025*

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 #: Q3094

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: 09/23/2025



# SAMPLE DATA



## Report of Analysis

Client:	Scientific Design	Date Collected:	08/27/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5670-18-000F	SDG No.:	Q3094
Lab Sample ID:	Q3094-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	545	OR	1	0.40	1.00	mg/L		09/16/25 11:11	9060A

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:	Scientific Design	Date Collected:	08/27/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5670-18-000FDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	807	D	100	40.0	100	mg/L		09/16/25 16:00	9060A

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:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001W	SDG No.:	Q3094
Lab Sample ID:	Q3094-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	2850	OR	10	4.00	10.0	mg/L		09/16/25 12:38	9060A

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:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-02DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3600	OR	100	40.0	100	mg/L		09/16/25 16:32	9060A

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:	Scientific Design	Date Collected:	09/09/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WDL2	SDG No.:	Q3094
Lab Sample ID:	Q3094-02DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3530	D	500	200	500	mg/L		09/17/25 12:50	9060A

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:	Scientific Design	Date Collected:	09/10/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-08-001WP	SDG No.:	Q3094
Lab Sample ID:	Q3094-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	1500	D	100	40.0	100	mg/L		09/16/25 13:33	9060A

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:	Scientific Design	Date Collected:	09/11/25 12:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-11-001C	SDG No.:	Q3094
Lab Sample ID:	Q3094-04	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		09/12/25 18:30	SM 5210 B-16
TOC	3530	OR	100	40.0	100	mg/L		09/16/25 14:05	9060A

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:	Scientific Design	Date Collected:	09/11/25 00:00
Project:	Carrier Post-Treatment	Date Received:	09/12/25
Client Sample ID:	5674-11-001CDL	SDG No.:	Q3094
Lab Sample ID:	Q3094-04DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TOC	3610	D	500	200	500	mg/L		09/17/25 12:23	9060A

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

<b>OrderID:</b>	Q3094	<b>OrderDate:</b>	9/12/2025 12:36:05 PM
<b>Client:</b>	Scientific Design	<b>Project:</b>	Carrier Post-Treatment
<b>Contact:</b>	Emily Chen	<b>Location:</b>	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3094-01	5670-18-000F	WATER	TOC	9060A	08/27/25 00:00		09/16/25 11:11	09/12/25
Q3094-01DL	5670-18-000FDL	WATER	TOC	9060A	08/27/25 00:00		09/16/25 16:00	09/12/25
Q3094-02	5674-08-001W	WATER	TOC	9060A	09/09/25 00:00		09/16/25 12:38	09/12/25
Q3094-02DL	5674-08-001WDL	WATER	TOC	9060A	09/09/25 00:00		09/16/25 16:32	09/12/25
Q3094-02DL 2	5674-08-001WDL2	WATER	TOC	9060A	09/09/25 00:00		09/17/25 12:50	09/12/25
Q3094-03	5674-08-001WP	WATER	TOC	9060A	09/10/25 00:00		09/16/25 13:33	09/12/25
Q3094-04	5674-11-001C	WATER	BOD5	SM5210 B	09/11/25 12:00		09/12/25 18:30	09/12/25

### LAB CHRONICLE

Q3094-04DL	5674-11-001CDL	WATER	TOC	9060A		09/16/25 14:05	
					<b>09/11/25 00:00</b>		<b>09/12/25</b>
Q3094-04DL 2	5674-11-001CDL2	WATER	TOC	9060A		09/17/25 12:23	
					<b>09/11/25 00:00</b>		<b>09/12/25</b>
			TOC	9060A			



# 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: **Q3094**

COC Number:

CLIENT INFORMATION			PROJECT INFORMATION					BILLING INFORMATION																
COMPANY: Scientific Design			PROJECT NAME: Carrier Post-Treatment					BILL TO: PO#																
ADDRESS:			PROJECT #: LOCATION:					ADDRESS:																
CITY: STATE: ZIP:			PROJECT MANAGER: Emily Chan					CITY: STATE: ZIP:																
ATTENTION: Emily Chan			E-MAIL:					ATTENTION: PHONE:																
PHONE: FAX:			PHONE: FAX:					ANALYSIS																
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION					PRESERVATIVES																
FAX: DAYS* HARD COPY: DAYS* EDD: DAYS* * TO BE APPROVED BY ALLIANCE STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS			<input type="checkbox"/> RESEULTS ONLY <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> EDD Format					<input type="checkbox"/> USEPA CLP <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> Other					COMMENTS											
Alliance SAMPLE ID			PROJECT SAMPLE IDENTIFICATION			SAMPLE MATRIX		SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles		SPECIFY PRESERVATIVES										
								DATE TIME						A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other										
1.			5670-18-000F			Water				8/27/25 N/A		1 x												
2.			5674-08-001W			Water				9/9/25 N/A		1 x												
3.			5674-08-001WP			Water				9/10/25 N/A		1 x												
4.			5674-11-001C			Water				9/11/25 N/A		2 x		x										
5.																								
6.																								
7.																								
8.																								
9.																								
10.																								
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY																								
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 3.0 MeOH extraction requires an additional 4oz. Jar for percent solid <input type="checkbox"/> Ice in Cooler?																		
1.		9/12/25		1. yjg		Comments:																		
RELINQUISHED BY		DATE/TIME		RECEIVED BY																				
2.				2.																				
RELINQUISHED BY		DATE/TIME		RECEIVED FOR LAB BY		SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight																		
3.				3.		ALLIANCE: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight																		
Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO																								
WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY																								

### Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312