

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : PSEG ATHENIA SUBSTATION

MATRIX NEW WORLD ENGINEERING

26 Columbia Turnpike

Florham Park, NJ - 07932

Phone No: 973-240-1800

ORDER ID : Q3461

ATTENTION : Christopher Pittarese



Laboratory Certification ID # 20012



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DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

1

Laboratory Name : Alliance Technical Group LLC Client : Matrix New World Engineering
 Project Location : Clifton Project Number : 24-0935
 Laboratory Sample ID(s) : Q3461 Sampling Date(s) : 0/24/2025
 List DKQP Methods Used (e.g., 8260,8270, et Cetra) **8082A,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?	☒ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met?	☒ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	☐ Yes ☐ No ☒ 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)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)?	☒ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	☐ Yes ☒ 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?	☒ Yes ☐ No ☒ Yes ☐ No ☐ 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?	☒ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	☒ Yes ☐ 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 : Q3461

Project ID : PSEG Athenia Substation

Client : Matrix New World Engineering

Lab Sample Number

Q3461-01

Client Sample Number

SS-9R(4.5-5.0)

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: 10/31/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Matrix New World Engineering

Project Name: PSEG Athenia Substation

Project # N/A

Order ID # Q3461

Test Name: PCB

A. Number of Samples and Date of Receipt:

1 Solid samples were received on 10/24/2025.

B. Parameters

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

C. Analytical Techniques:

The analyses were performed on instrument GCECD_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analyses were performed on instrument GCECD_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis.

The Retention Times were met for all analysis.

The MS recoveries for {Q3461-01MS} with File ID: PO114707.D met requirements for all samples except for [AR1260(1)162% - AR1260(2)173%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {Q3461-01MSD} with File ID: PO114708.D recoveries met requirements for all samples except for [AR1260(1)196% - AR1260(2)208%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

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

The Initial Calibration met the requirements.



The Continuous Calibration File ID PO114694.D met the requirements except for Aroclor-1260(Peak-04) is failing in 2nd column however it is passing in 1st column therefore no corrective action taken.

Sample SS-9R(4.5-5.0) was diluted due to high concentrations.

E. Additional Comments:

The soil samples results are based on a dry weight basis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3461

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: 10/31/2025

Hit Summary Sheet
SW-846

SDG No.: Q3461

Order ID: Q3461

Client: Matrix New World Engineering

Project ID: PSEG Athenia Substation

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : SS-9R(4.5-5.0)								
Q3461-01	SS-9R(4.5-5.0)	SOIL	Aroclor-1254	584	E	3.60	19.2	ug/kg
Total Concentration:				584.000				
Client ID : SS-9R(4.5-5.0)DL								
Q3461-01DL	SS-9R(4.5-5.0)DL	SOIL	Aroclor-1254	521	D	7.30	38.5	ug/kg
Total Concentration:				521.000				



SAMPLE DATA

Report of Analysis

Client:	Matrix New World Engineering	Date Collected:	10/24/25
Project:	PSEG Athenia Substation	Date Received:	10/24/25
Client Sample ID:	SS-9R(4.5-5.0)	SDG No.:	Q3461
Lab Sample ID:	Q3461-01	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	88.2
Sample Wt/Vol:	30.06 g	Final Vol:	10000 uL
Prep Method:	SW3541	Test:	PCB
	Prep Date		10/28/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
12674-11-2	Aroclor-1016	4.50	U	1	4.50	19.2	ug/kg	10/28/25 11:52	PB170282
11104-28-2	Aroclor-1221	4.60	U	1	4.60	19.2	ug/kg	10/28/25 11:52	PB170282
11141-16-5	Aroclor-1232	4.20	U	1	4.20	19.2	ug/kg	10/28/25 11:52	PB170282
53469-21-9	Aroclor-1242	4.50	U	1	4.50	19.2	ug/kg	10/28/25 11:52	PB170282
12672-29-6	Aroclor-1248	6.70	U	1	6.70	19.2	ug/kg	10/28/25 11:52	PB170282
11097-69-1	Aroclor-1254	584	E	1	3.60	19.2	ug/kg	10/28/25 11:52	PB170282
37324-23-5	Aroclor-1262	5.70	U	1	5.70	19.2	ug/kg	10/28/25 11:52	PB170282
11100-14-4	Aroclor-1268	4.10	U	1	4.10	19.2	ug/kg	10/28/25 11:52	PB170282
11096-82-5	Aroclor-1260	3.70	U	1	3.70	19.2	ug/kg	10/28/25 11:52	PB170282
SURROGATES									
877-09-8	Tetrachloro-m-xylene	27.7			30 (32) - 150 (144)	139%	SPK: 20		
2051-24-3	Decachlorobiphenyl	24.0			30 (32) - 150 (175)	120%	SPK: 20		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	Matrix New World Engineering	Date Collected:	10/24/25
Project:	PSEG Athenia Substation	Date Received:	10/24/25
Client Sample ID:	SS-9R(4.5-5.0)DL	SDG No.:	Q3461
Lab Sample ID:	Q3461-01DL	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	88.2
Sample Wt/Vol:	30.06 g	Final Vol:	10000 uL
Prep Method:	SW3541	Test:	PCB
	Prep Date		10/28/25

CAS Number	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Date Ana.	BatchID
TARGETS									
12674-11-2	Aroclor-1016	8.90	UD	2	8.90	38.5	ug/kg	10/28/25 13:24	PB170282
11104-28-2	Aroclor-1221	9.10	UD	2	9.10	38.5	ug/kg	10/28/25 13:24	PB170282
11141-16-5	Aroclor-1232	8.40	UD	2	8.40	38.5	ug/kg	10/28/25 13:24	PB170282
53469-21-9	Aroclor-1242	9.10	UD	2	9.10	38.5	ug/kg	10/28/25 13:24	PB170282
12672-29-6	Aroclor-1248	13.4	UD	2	13.4	38.5	ug/kg	10/28/25 13:24	PB170282
11097-69-1	Aroclor-1254	521	D	2	7.30	38.5	ug/kg	10/28/25 13:24	PB170282
37324-23-5	Aroclor-1262	11.4	UD	2	11.4	38.5	ug/kg	10/28/25 13:24	PB170282
11100-14-4	Aroclor-1268	8.10	UD	2	8.10	38.5	ug/kg	10/28/25 13:24	PB170282
11096-82-5	Aroclor-1260	7.30	UD	2	7.30	38.5	ug/kg	10/28/25 13:24	PB170282
SURROGATES									
877-09-8	Tetrachloro-m-xylene	24.5			30 (32) - 150 (144)	123%	SPK: 20		
2051-24-3	Decachlorobiphenyl	21.2			30 (32) - 150 (175)	106%	SPK: 20		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

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N = Presumptive Evidence of a Compound

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S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

LAB CHRONICLE

OrderID:	Q3461	OrderDate:	10/24/2025 1:28:00 PM
Client:	Matrix New World Engineering	Project:	PSEG Athenia Substation
Contact:	Christopher Pittarese	Location:	D41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3461-01	SS-9R(4.5-5.0)	SOIL			10/24/25			10/24/25
			PCB	8082A		10/28/25	10/28/25	
Q3461-01DL	SS-9R(4.5-5.0)DL	SOIL			10/24/25			10/24/25
			PCB	8082A		10/28/25	10/28/25	



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Matrix New World Eng.
ADDRESS: 26 Columbia Tpke
CITY: Florham Park STATE: NJ ZIP: 07932
ATTENTION: Chris Pittarese
PHONE: 9732401800 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: PSEG Athenia Substation
PROJECT NO.: 24-0935 LOCATION: Clifton
PROJECT MANAGER: Chris Pittarese
e-mail: cpittarese@mne.com
PHONE: 9732401800 FAX:

CLIENT BILLING INFORMATION

BILL TO: SAME AS CLIENT PO#: INFO
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 24-HR-TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ 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

1	2	3	4	5	6	7	8	9

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER	
1.	SS-9R(4.5-5.0)	Soil		X	10/24/25	1025	1	X										
2.	SS-9R(5.0-5.5)	Soil		X	10/24/25	1020	1	H										
3.	SS-25(4.5-5.0)	Soil		X	10/24/25	1235	1	H										
4.	SS-25(5.0-5.5)	Soil		X	10/24/25	1255	1	H										
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

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

RELINQUISHED BY SAMPLER: 1. <u>Erika Amula</u>	DATE/TIME: <u>10/24/25</u>	RECEIVED BY: 1. <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP <u>2.9°C</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME:	RECEIVED BY: 2. <u>[Signature]</u>	Comments: <u>X: RUN ; H: HOLD</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>10.24.2025</u>	RECEIVED BY: 3. <u>[Signature]</u>	

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

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