ACER ASSOCIATES, LLC

VI Results Notification Letter

January 24, 2025

Mr. Sean Dukes
Archdiocese of Philadelphia
222 N. 17th Street
Philadelphia, PA 19103

Re: Indoor Air Sampling at:
Conwell Egan High School, 611 Wistar Rd, Fairless Hills, PA 19030

For: ***Conwell Egan High School***
611 Wistar Rd, Fairless Hills, PA 19030
PADEP eFACTS Primary Facility No. 873585

Dear Mr. Dukes:

This correspondence provides you with the analytical results for indoor air samples collected at the above referenced Archdiocese of Philadelphia's property on December 31, 2024. The samples were collected as part of a vapor intrusion investigation due to the presence of heating oil observed in the sump located in the boiler room in the basement of the building.

The samples were analyzed for PADEP Short List#2 Heating Oil parameters using USEPA Method TO-15. Summarized below and in the attached table are the analytical results of indoor air samples collected from the four (4) separate locations inside the school building and from an ambient (outdoor) air sample. The indoor air sample analytical results are compared to the Pennsylvania Department of Environmental Protection (PADEP) Indoor Air Statewide Health Standard Vapor Intrusion Screening Values (SVIA).

RESULTS:

All PADEP Short List#2 Heating Oil parameter concentrations were either non detect or detected at concentrations below the PADEP Residential and Non-Residential Indoor Air Statewide Health Standard Vapor Intrusion Screening Values (SVIA) in all four (4) indoor air samples collected from inside the school building, as well as in the ambient air sample

(indicative of background air quality) collected from outside the school building. As such vapor intrusion does not appear to be occurring at this time.

If you have any questions about your sampling results, please contact Scott Horn at (856) 809-1202 or scotthorn@acerassociates.com. For information about vapor intrusion, please see PADEP's web page at https://www.pa.gov/agencies/dep/programs-and-services/land/land-recycling-program/standards-guidance-and-procedures/guidance-and-technical-tools/vapor-intrusion.html.

Sincerely,

J. Scott Horn

J. Scott Horn, PG, CHMM
President

c: David C. Damsker, Director
Bucks County Department of Health
Neshaminy Manor Center
1282 Almshouse Road, 2nd Floor
Doylestown PA 18901

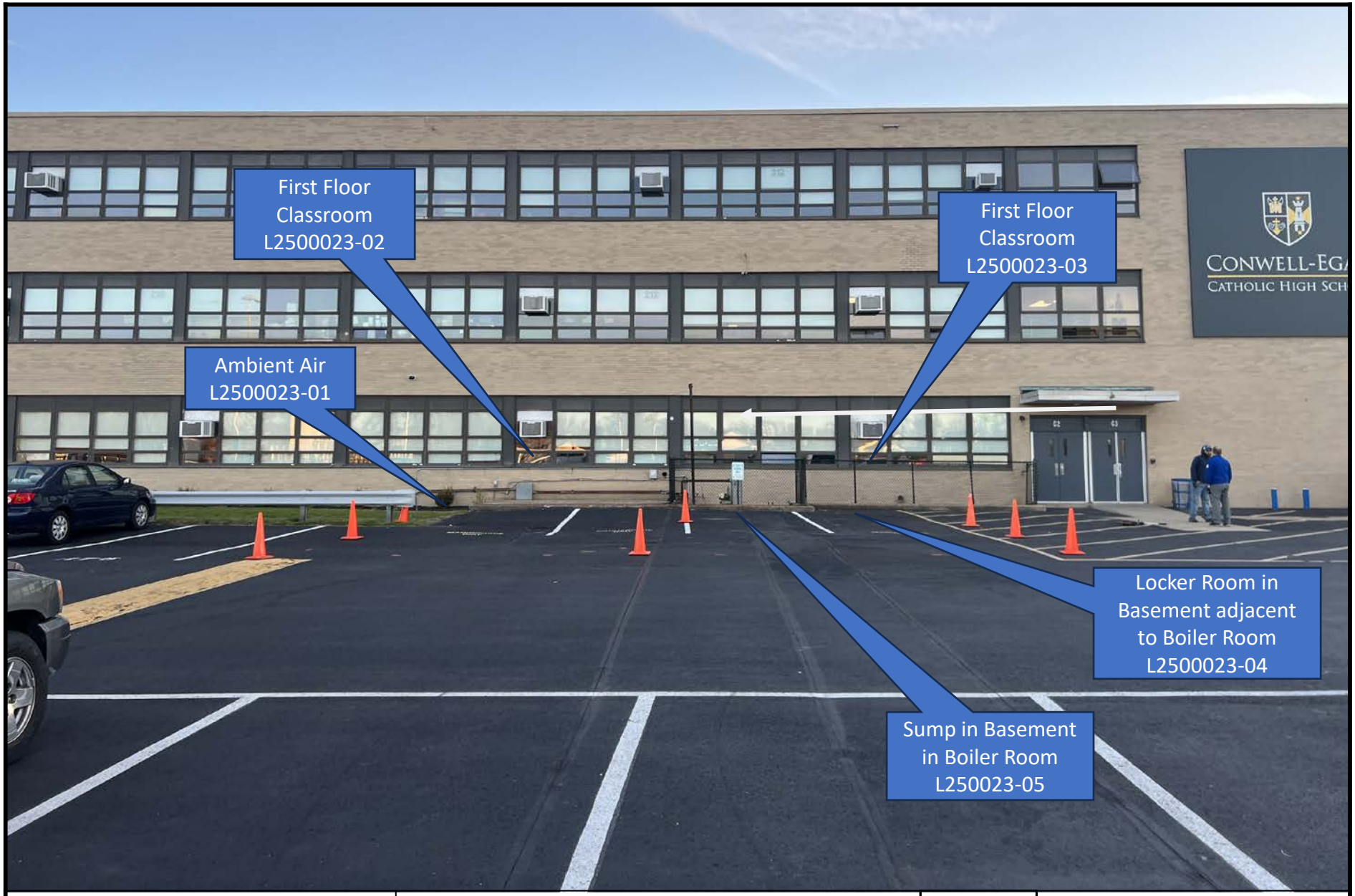
Vapor Intrusion Investigation Indoor Air Sample Location Spreadsheet

Site Name: Conwell Egan High School
Address: 611 Wistar Rd, Fairless Hills, PA 19030

Lab Sample	Date Collected	Sample	Location
L2500023-01	**12/31/2024**	**Indoor Air**	**Ambient-Outside**
L2500023-02	**12/31/2024**	**Indoor Air**	**Building Interior-First Floor Classroom**
L2500023-03	**12/31/2024**	**Indoor Air**	**Building Interior-First Floor Classroom**
L2500023-04	**12/31/2024**	**Indoor Air**	**Building Interior-Basement (Locker Room adjacent to Boiler Room)**
L2500023-05	**12/31/2024**	**Indoor Air**	**Building Interior-Basement (Boiler Room)**

Indoor Air Sample Analytical Results Table

Lab Sample ID: Date Collected: Units: Sample Matrix:	PADEP Indoor Air Statewide Health Standard Vapor Intrusion Screening Values (SVIA)- Residential	PADEP Indoor Air Statewide Health Standard Vapor Intrusion Screening Values (SVIA)- Non-Residential	L2500023-01 12/31/2024 ug/m3 Indoor Air	L2500023-02 12/31/2024 ug/m3 Indoor Air	L2500023-03 12/31/2024 ug/m3 Indoor Air	L2500023-04 12/31/2024 ug/m3 Indoor Air	L2500023-05 12/31/2024 ug/m3 Indoor Air
Volatile Organic Compounds							
Methyl tert butyl ether	94	470	ND	ND	ND	ND	ND
Benzene	3.1	16	0.712	0.591	0.764	0.668	0.789
Toluene	5,200	22,000	1.19	1.22	1.15	0.976	1.24
Xylenes, Total	100	440	1.55	1.47	ND	1.02	2.01
Ethylbenzene	9.7	49	0.295	0.256	ND	ND	0.339
p/m-Xylene	NS	NS	1.12	0.973	ND	0.721	1.32
o-Xylene	NS	NS	0.434	0.495	ND	0.300	0.695
Isopropylbenzene	NS	NS	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	63	260	ND	ND	ND	ND	0.516
1,2,4-Trimethylbenzene	63	260	0.462	0.492	ND	ND	1.13
Naphthalene	0.72	3.6	ND	ND	ND	ND	0.136



Conwell Egan High School
611 Wistar Road
Fairless Hills, Bucks County, PA 19030
ACER Project #20240076

ACER Associates, LLC

1012 Industrial Drive, West Berlin, New Jersey 08091
Telephone: (856) 809-1202 Fax: (856) 809-1203

N

VI Sample Location Map

ANALYTICAL REPORT

Lab Number:	L2500023
Client:	Acer Associates, LLC 1012 Industrial Drive West Berlin, NJ 08091
ATTN:	Vince Krisak
Phone:	(856) 809-1202
Project Name:	CONWELL EGAN
Project Number:	20240076
Report Date:	01/23/25

Certifications & Approvals: NH ELAP (2249).

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2500023-01	IA01-3284	AIR	FAIRLESS HILLS	12/31/24 09:05	12/31/24
L2500023-02	IA02-0644	AIR	FAIRLESS HILLS	12/31/24 09:05	12/31/24
L2500023-03	IA03-0953	AIR	FAIRLESS HILLS	12/31/24 09:05	12/31/24
L2500023-04	IA04-3964	AIR	FAIRLESS HILLS	12/31/24 09:05	12/31/24
L2500023-05	IA05-0948	AIR	FAIRLESS HILLS	12/31/24 09:05	12/31/24

Project Name:	CONWELL EGAN	**Lab Number:**	L2500023
Project Number:	20240076	**Report Date:**	01/23/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	CONWELL EGAN	**Lab Number:**	L2500023
Project Number:	20240076	**Report Date:**	01/23/25

Case Narrative (continued)

Report Revision

January 23, 2025 the report has been amended to report the PA #2 heating oil list at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on December 26, 2024. The canister certification data is provided as an addendum.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 01/23/25

AIR

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-01
Client ID: IA01-3284
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/12/25 20:17
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Air Lab								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Benzene	0.223	0.200	0.064	0.712	0.639	0.205		1
Toluene	0.315	0.200	0.087	1.19	0.754	0.327		1
Xylenes, Total	0.357	0.200	0.062	1.55	0.869	0.270	J	1
Ethylbenzene	0.068	0.200	0.058	0.295	0.869	0.250	J	1
p/m-Xylene	0.257	0.400	0.125	1.12	1.74	0.543	J	1
o-Xylene	0.100	0.200	0.062	0.434	0.869	0.270	J	1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
1,2,4-Trimethylbenzene	0.094	0.200	0.058	0.462	0.983	0.284	J	1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-01
Client ID: IA01-3284
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 20:17
Analyst: TPH

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Air Lab								
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	92		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-02
Client ID: IA02-0644
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/12/25 20:57
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Air Lab								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Benzene	0.185	0.200	0.064	0.591	0.639	0.205	J	1
Toluene	0.325	0.200	0.087	1.22	0.754	0.327		1
Xylenes, Total	0.338	0.200	0.062	1.47	0.869	0.270	J	1
Ethylbenzene	0.059	0.200	0.058	0.256	0.869	0.250	J	1
p/m-Xylene	0.224	0.400	0.125	0.973	1.74	0.543	J	1
o-Xylene	0.114	0.200	0.062	0.495	0.869	0.270	J	1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
1,2,4-Trimethylbenzene	0.100	0.200	0.058	0.492	0.983	0.284	J	1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-02
Client ID: IA02-0644
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 20:57
Analyst: TPH

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Air Lab								
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	100		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-03
Client ID: IA03-0953
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/12/25 21:36
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Air Lab								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Benzene	0.239	0.200	0.064	0.764	0.639	0.205		1
Toluene	0.304	0.200	0.087	1.15	0.754	0.327		1
Xylenes, Total	ND	0.200	0.062	ND	0.869	0.270		1
Ethylbenzene	ND	0.200	0.058	ND	0.869	0.250		1
p/m-Xylene	ND	0.400	0.125	ND	1.74	0.543		1
o-Xylene	ND	0.200	0.062	ND	0.869	0.270		1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
1,2,4-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.284		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	99		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-03
Client ID: IA03-0953
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 21:36
Analyst: TPH

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Air Lab								
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	100		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	103		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-04
Client ID: IA04-3964
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/12/25 22:16
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Air Lab								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Benzene	0.209	0.200	0.064	0.668	0.639	0.205		1
Toluene	0.259	0.200	0.087	0.976	0.754	0.327		1
Xylenes, Total	0.235	0.200	0.062	1.02	0.869	0.270	J	1
Ethylbenzene	ND	0.200	0.058	ND	0.869	0.250		1
p/m-Xylene	0.166	0.400	0.125	0.721	1.74	0.543	J	1
o-Xylene	0.069	0.200	0.062	0.300	0.869	0.270	J	1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
1,2,4-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.284		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-04
Client ID: IA04-3964
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 22:16
Analyst: TPH

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Air Lab								
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-05
Client ID: IA05-0948
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/12/25 22:56
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Air Lab								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Benzene	0.247	0.200	0.064	0.789	0.639	0.205		1
Toluene	0.330	0.200	0.087	1.24	0.754	0.327		1
Xylenes, Total	0.463	0.200	0.062	2.01	0.869	0.270	J	1
Ethylbenzene	0.078	0.200	0.058	0.339	0.869	0.250	J	1
p/m-Xylene	0.303	0.400	0.125	1.32	1.74	0.543	J	1
o-Xylene	0.160	0.200	0.062	0.695	0.869	0.270	J	1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	0.105	0.200	0.060	0.516	0.983	0.295	J	1
1,2,4-Trimethylbenzene	0.230	0.200	0.058	1.13	0.983	0.284		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	93		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

SAMPLE RESULTS

Lab ID: L2500023-05
Client ID: IA05-0948
Sample Location: FAIRLESS HILLS

Date Collected: 12/31/24 09:05
Date Received: 12/31/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 22:56
Analyst: TPH

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Air Lab								
Naphthalene	0.026	0.050	0.021	0.136	0.262	0.110	J	1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	96		60-140

Project Name: CONWELL EGAN
Project Number: 20240076
Lab Number: L2500023
Report Date: 01/23/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 01/12/25 19:36

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Air Lab for sample(s): 01-05 Batch: WG2019031-4								
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1

Project Name: CONWELL EGAN
Project Number: 20240076
Lab Number: L2500023
Report Date: 01/23/25

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/12/25 18:57

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Air Lab for sample(s): 01-05 Batch: WG2021046-4								
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Xylenes, Total	ND	0.200	0.062	ND	0.869	0.270		1
Benzene	ND	0.200	0.064	ND	0.639	0.205		1
Toluene	ND	0.200	0.087	ND	0.754	0.327		1
Ethylbenzene	ND	0.200	0.058	ND	0.869	0.250		1
p/m-Xylene	ND	0.400	0.125	ND	1.74	0.543		1
o-Xylene	ND	0.200	0.062	ND	0.869	0.270		1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
1,2,4-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.284		1
Naphthalene	ND	0.190	0.059	ND	0.996	0.309		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-05 Batch: WG2019031-3								
Naphthalene	101		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Air Lab	Associated sample(s): 01-05		Batch: WG2021046-3					
Methyl tert butyl ether	103		-		70-130	-		
Benzene	101		-		70-130	-		
Toluene	94		-		70-130	-		
Ethylbenzene	95		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
o-Xylene	99		-		70-130	-		
Isopropylbenzene	101		-		70-130	-		
1,3,5-Trimethylbenzene	105		-		70-130	-		
1,2,4-Trimethylbenzene	108		-		70-130	-		
Naphthalene	101		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Air Lab Associated sample(s): 01-05 QC Batch ID: WG2019031-5 QC Sample: L2500023-05 Client ID: IA05-0948						
Naphthalene	0.026J	0.026J	ppbV	NC		25
Volatile Organics in Air - Mansfield Air Lab Associated sample(s): 01-05 QC Batch ID: WG2021046-5 QC Sample: L2500023-05 Client ID: IA05-0948						
Methyl tert butyl ether	ND	ND	ppbV	NC		25
Benzene	0.247	0.254	ppbV	3		25
Toluene	0.330	0.334	ppbV	1		25
Xylenes, Total	0.463J	0.464J	ppbV	NC		25
Ethylbenzene	0.078J	0.079J	ppbV	NC		25
p/m-Xylene	0.303J	0.306J	ppbV	NC		25
o-Xylene	0.160J	0.158J	ppbV	NC		25
Isopropylbenzene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	0.105J	0.102J	ppbV	NC		25
1,2,4-Trimethylbenzene	0.230	0.232	ppbV	1		25

Project Name: CONWELL EGAN

Project Number: 20240076

Lab Number: L2500023

Report Date: 01/23/25

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt	Flow Controler Leak Chk	Flow Out mL/min	Flow In	% RPD
L2500023-01	IA01-3284	0396	Flow 5	12/26/24	500501		-	-	-	Pass	3.0	3.3	10
L2500023-01	IA01-3284	3284	6.0L Can	12/26/24	500501	L2475686-02	Pass	-29.9	-12.3	-	-	-	-
L2500023-02	IA02-0644	02256	Flow 5	12/26/24	500501		-	-	-	Pass	3.0	3.5	15
L2500023-02	IA02-0644	644	6.0L Can	12/26/24	500501	L2475686-02	Pass	-29.9	-12.1	-	-	-	-
L2500023-03	IA03-0953	01891	Flow 5	12/26/24	500501		-	-	-	Pass	3.0	3.2	6
L2500023-03	IA03-0953	953	6.0L Can	12/26/24	500501	L2475686-02	Pass	-29.9	-6.5	-	-	-	-
L2500023-04	IA04-3964	0284	Flow 5	12/26/24	500501		-	-	-	Pass	2.9	3.3	13
L2500023-04	IA04-3964	3964	6.0L Can	12/26/24	500501	L2475686-02	Pass	-29.9	-10.5	-	-	-	-
L2500023-05	IA05-0948	02246	Flow 5	12/26/24	500501		-	-	-	Pass	2.9	3.6	22
L2500023-05	IA05-0948	948	6.0L Can	12/26/24	500501	L2475686-02	Pass	-30.0	-10.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/23/24 19:34
Analyst: KJD

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	0.046	ND	0.707	0.164		1
Propylene	ND	0.500	0.135	ND	0.861	0.232		1
Propane	ND	0.500	0.152	ND	0.902	0.274		1
Dichlorodifluoromethane	ND	0.200	0.076	ND	0.989	0.374		1
Chloromethane	ND	0.200	0.058	ND	0.413	0.119		1
Freon-114	ND	0.200	0.050	ND	1.40	0.352		1
Methanol	ND	5.00	3.03	ND	6.55	3.97		1
Vinyl chloride	ND	0.200	0.058	ND	0.511	0.149		1
1,3-Butadiene	ND	0.200	0.062	ND	0.442	0.137		1
Butane	ND	0.200	0.080	ND	0.475	0.190		1
Bromomethane	ND	0.200	0.055	ND	0.777	0.212		1
Chloroethane	ND	0.200	0.065	ND	0.528	0.171		1
Ethanol	ND	5.00	1.74	ND	9.42	3.28		1
Dichlorofluoromethane	ND	0.200	0.112	ND	0.842	0.471		1
Vinyl bromide	ND	0.200	0.072	ND	0.874	0.316		1
Acrolein	ND	0.500	0.149	ND	1.15	0.342		1
Acetone	ND	1.00	0.515	ND	2.38	1.22		1
Acetonitrile	ND	0.200	0.101	ND	0.336	0.170		1
Trichlorofluoromethane	ND	0.200	0.079	ND	1.12	0.442		1
Isopropanol	ND	1.00	0.272	ND	2.46	0.669		1
Acrylonitrile	ND	0.500	0.089	ND	1.09	0.194		1
Pentane	ND	0.200	0.113	ND	0.590	0.333		1
Ethyl ether	ND	0.200	0.085	ND	0.606	0.259		1
1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.225		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	0.132	ND	1.52	0.400		1
Methylene chloride	ND	0.500	0.125	ND	1.74	0.434		1
3-Chloropropene	ND	0.200	0.086	ND	0.626	0.269		1
Carbon disulfide	ND	0.200	0.047	ND	0.623	0.145		1
Freon-113	ND	0.200	0.051	ND	1.53	0.388		1
trans-1,2-Dichloroethene	ND	0.200	0.076	ND	0.793	0.299		1
1,1-Dichloroethane	ND	0.200	0.057	ND	0.809	0.230		1
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.162		1
Vinyl acetate	ND	1.00	0.323	ND	3.52	1.14		1
Xylenes, total	ND	0.600	0.062	ND	0.869	0.270		1
2-Butanone	ND	0.500	0.099	ND	1.47	0.292		1
cis-1,2-Dichloroethene	ND	0.200	0.060	ND	0.793	0.236		1
Ethyl Acetate	ND	0.500	0.297	ND	1.80	1.07		1
Chloroform	ND	0.200	0.055	ND	0.977	0.270		1
Tetrahydrofuran	ND	0.500	0.117	ND	1.47	0.345		1
2,2-Dichloropropane	ND	0.200	0.043	ND	0.924	0.198		1
1,2-Dichloroethane	ND	0.200	0.079	ND	0.809	0.319		1
n-Hexane	ND	0.200	0.074	ND	0.705	0.262		1
Diisopropyl ether	ND	0.200	0.063	ND	0.836	0.264		1
tert-Butyl Ethyl Ether	ND	0.200	0.073	ND	0.836	0.306		1
1,2-Dichloroethene (total)	ND	1.00	0.060	ND	1.00	0.236		1
1,1,1-Trichloroethane	ND	0.200	0.061	ND	1.09	0.335		1
1,1-Dichloropropene	ND	0.200	0.059	ND	0.908	0.269		1
Benzene	ND	0.200	0.064	ND	0.639	0.205		1
Carbon tetrachloride	ND	0.200	0.069	ND	1.26	0.432		1
Cyclohexane	ND	0.200	0.073	ND	0.688	0.251		1
tert-Amyl Methyl Ether	ND	0.200	0.067	ND	0.836	0.281		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	0.060	ND	1.42	0.425		1
1,2-Dichloropropane	ND	0.200	0.063	ND	0.924	0.292		1
Bromodichloromethane	ND	0.200	0.069	ND	1.34	0.462		1
1,4-Dioxane	ND	0.200	0.054	ND	0.721	0.194		1
Trichloroethene	ND	0.200	0.055	ND	1.07	0.295		1
2,2,4-Trimethylpentane	ND	0.200	0.069	ND	0.934	0.323		1
Methyl Methacrylate	ND	0.500	0.226	ND	2.05	0.925		1
Heptane	ND	0.200	0.083	ND	0.820	0.339		1
cis-1,3-Dichloropropene	ND	0.200	0.067	ND	0.908	0.306		1
4-Methyl-2-pentanone	ND	0.500	0.190	ND	2.05	0.779		1
trans-1,3-Dichloropropene	ND	0.200	0.078	ND	0.908	0.355		1
1,1,2-Trichloroethane	ND	0.200	0.058	ND	1.09	0.318		1
Toluene	ND	0.200	0.087	ND	0.754	0.327		1
1,3-Dichloropropane	ND	0.200	0.054	ND	0.924	0.248		1
2-Hexanone	ND	0.200	0.091	ND	0.820	0.374		1
Dibromochloromethane	ND	0.200	0.057	ND	1.70	0.482		1
1,2-Dibromoethane	ND	0.200	0.054	ND	1.54	0.418		1
Butyl acetate	ND	0.500	0.208	ND	2.38	0.989		1
Octane	ND	0.200	0.068	ND	0.934	0.316		1
Tetrachloroethene	ND	0.200	0.063	ND	1.36	0.425		1
1,1,1,2-Tetrachloroethane	ND	0.200	0.051	ND	1.37	0.349		1
Chlorobenzene	ND	0.200	0.052	ND	0.921	0.238		1
Ethylbenzene	ND	0.200	0.058	ND	0.869	0.250		1
p/m-Xylene	ND	0.400	0.125	ND	1.74	0.543		1
Bromoform	ND	0.200	0.060	ND	2.07	0.616		1
Styrene	ND	0.200	0.060	ND	0.852	0.254		1
1,1,2,2-Tetrachloroethane	ND	0.200	0.052	ND	1.37	0.357		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	0.062	ND	0.869	0.270		1
1,2,3-Trichloropropane	ND	0.200	0.058	ND	1.21	0.347		1
Nonane	ND	0.200	0.074	ND	1.05	0.387		1
Isopropylbenzene	ND	0.200	0.062	ND	0.983	0.305		1
Bromobenzene	ND	0.200	0.058	ND	0.793	0.230		1
2-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.394		1
n-Propylbenzene	ND	0.200	0.063	ND	0.983	0.311		1
4-Chlorotoluene	ND	0.200	0.077	ND	1.04	0.396		1
4-Ethyltoluene	ND	0.200	0.055	ND	0.983	0.272		1
1,3,5-Trimethylbenzene	ND	0.200	0.060	ND	0.983	0.295		1
tert-Butylbenzene	ND	0.200	0.055	ND	1.10	0.302		1
1,2,4-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.284		1
Decane	ND	0.200	0.070	ND	1.16	0.406		1
Benzyl chloride	ND	0.200	0.094	ND	1.04	0.486		1
1,3-Dichlorobenzene	ND	0.200	0.078	ND	1.20	0.467		1
1,4-Dichlorobenzene	ND	0.200	0.083	ND	1.20	0.497		1
sec-Butylbenzene	ND	0.200	0.055	ND	1.10	0.300		1
p-Isopropyltoluene	ND	0.200	0.057	ND	1.10	0.311		1
1,2-Dichlorobenzene	ND	0.200	0.062	ND	1.20	0.372		1
n-Butylbenzene	ND	0.200	0.054	ND	1.10	0.294		1
1,2-Dibromo-3-chloropropane	ND	0.200	0.062	ND	1.93	0.603		1
Undecane	ND	0.200	0.071	ND	1.28	0.453		1
Dodecane	ND	0.200	0.089	ND	1.39	0.621		1
1,2,4-Trichlorobenzene	ND	0.200	0.100	ND	1.48	0.742		1
Naphthalene	ND	0.200	0.078	ND	1.05	0.409		1
1,2,3-Trichlorobenzene	ND	0.200	0.074	ND	1.48	0.548		1
Hexachlorobutadiene	ND	0.200	0.061	ND	2.13	0.647		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/23/24 19:34
Analyst: KJD

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.050	ND	0.989	0.247		1
Chloromethane	ND	0.200	0.076	ND	0.413	0.156		1
Freon-114	ND	0.050	0.006	ND	0.349	0.045		1
Vinyl chloride	ND	0.020	0.009	ND	0.051	0.023		1
1,3-Butadiene	ND	0.020	0.011	ND	0.044	0.024		1
Bromomethane	ND	0.020	0.009	ND	0.078	0.037		1
Chloroethane	ND	0.100	0.040	ND	0.264	0.104		1
Acrolein	ND	0.050	0.039	ND	0.115	0.089		1
Acetone	ND	1.00	0.539	ND	2.38	1.28		1
Trichlorofluoromethane	ND	0.050	0.009	ND	0.281	0.052		1
Acrylonitrile	ND	0.500	0.162	ND	1.09	0.352		1
1,1-Dichloroethene	ND	0.020	0.008	ND	0.079	0.031		1
Methylene chloride	ND	0.500	0.110	ND	1.74	0.382		1
Freon-113	ND	0.050	0.008	ND	0.383	0.064		1
trans-1,2-Dichloroethene	ND	0.020	0.009	ND	0.079	0.036		1
1,1-Dichloroethane	ND	0.020	0.009	ND	0.081	0.035		1
Methyl tert butyl ether	ND	0.200	0.026	ND	0.721	0.094		1
2-Butanone	ND	0.500	0.132	ND	1.47	0.389		1
cis-1,2-Dichloroethene	ND	0.020	0.010	ND	0.079	0.040		1
Chloroform	ND	0.020	0.007	ND	0.098	0.035		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.034		1
1,1,1-Trichloroethane	ND	0.020	0.006	ND	0.109	0.032		1
Benzene	ND	0.100	0.030	ND	0.319	0.095		1
Carbon tetrachloride	ND	0.020	0.011	ND	0.126	0.069		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	0.008	ND	0.092	0.038		1
Bromodichloromethane	ND	0.020	0.007	ND	0.134	0.050		1
1,4-Dioxane	ND	0.100	0.034	ND	0.360	0.124		1
Trichloroethene	ND	0.020	0.006	ND	0.107	0.032		1
cis-1,3-Dichloropropene	ND	0.020	0.012	ND	0.091	0.054		1
4-Methyl-2-pentanone	ND	0.500	0.191	ND	2.05	0.783		1
trans-1,3-Dichloropropene	ND	0.020	0.012	ND	0.091	0.052		1
1,1,2-Trichloroethane	ND	0.020	0.010	ND	0.109	0.053		1
Toluene	ND	0.100	0.017	ND	0.377	0.063		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.009	ND	0.154	0.070		1
Tetrachloroethene	ND	0.020	0.007	ND	0.136	0.050		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.010	ND	0.137	0.069		1
Chlorobenzene	ND	0.100	0.026	ND	0.461	0.119		1
Ethylbenzene	ND	0.020	0.009	ND	0.087	0.037		1
p/m-Xylene	ND	0.040	0.018	ND	0.174	0.078		1
Bromoform	ND	0.020	0.011	ND	0.207	0.115		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.046		1
o-Xylene	ND	0.020	0.009	ND	0.087	0.038		1
Isopropylbenzene	ND	0.200	0.030	ND	0.983	0.147		1
4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.049		1
1,3,5-Trimethybenzene	ND	0.020	0.010	ND	0.098	0.047		1
1,2,4-Trimethylbenzene	ND	0.020	0.008	ND	0.098	0.037		1
Benzyl chloride	ND	0.100	0.033	ND	0.518	0.172		1
1,3-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.046		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.045		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2475686
Report Date: 01/23/25

Air Canister Certification Results

Lab ID: L2475686-02
Client ID: CAN 1556 SHELF 57
Sample Location:

Date Collected: 12/23/24 08:00
Date Received: 12/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	0.027	ND	1.10	0.146		1
p-Isopropyltoluene	ND	0.200	0.037	ND	1.10	0.201		1
1,2-Dichlorobenzene	ND	0.020	0.006	ND	0.120	0.037		1
n-Butylbenzene	ND	0.200	0.032	ND	1.10	0.175		1
1,2,4-Trichlorobenzene	ND	0.050	0.015	ND	0.371	0.108		1
Naphthalene	ND	0.050	0.021	ND	0.262	0.110		1
1,2,3-Trichlorobenzene	ND	0.050	0.022	ND	0.371	0.166		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

Project Name: CONWELL EGAN
Project Number: 20240076

Lab Number: L2500023
Report Date: 01/23/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2500023-01A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2500023-02A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2500023-03A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2500023-04A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2500023-05A	Canister - 6L (Batch Certified)	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	CONWELL EGAN	**Lab Number:**	L2500023
Project Number:	20240076	**Report Date:**	01/23/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CONWELL EGAN	**Lab Number:**	L2500023
Project Number:	20240076	**Report Date:**	01/23/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	CONWELL EGAN	**Lab Number:**	L2500023
Project Number:	20240076	**Report Date:**	01/23/25

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: CONWELL EGAN
Project Number: 20240076
Lab Number: L2500023
Report Date: 01/23/25

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Alpha SOP 23528

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Project Manager.

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE ____ OF ____

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/1/25

ALPHA Job #: L2500023

Client Information

Client: ACER Associates
Address: 1012 Industrial Dr West Berlin NJ
Phone: 856 809 1202
Fax:
Email: vincekrisak@acerassociates.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Conwell Egan
Project Location: Fairless Hills
Project #: 20240076
Project Manager: Vince Krisak
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ANALYSIS: TO-15, TO-15 SIM, APH, Fixed Gases, Sulfides & Mercaptans by TO-15

ALPHA Lab ID (Lab Use Only)	Sample ID	End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
00023-01	IA01-3284	12/31	8:55	9:05	-29.94	-12.61	AA	JC	5L	3284	0396	X					
02	IA02-0644	12/31	8:55	9:05	-29.60	-12.32	AA	JC	5L	0644	2256	X					
03	IA03-0953	12/31	8:55	9:05	-29.74	-8.07	AA	JC	5L	0953	1891	X					
04	IA04-3964	12/31	8:58	9:05	-30.16	-11.01	AA	JC	5L	3964	0284	X					
05	IA05-0948	12/31	8:55	9:05	-29.75	-11.81	AA	JC	5L	0948	2246	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
Samantha Masino	12/31/24 11:56	D Rolman PACE	12/31/24 1156
D Rolman PACE	12/31/24 14:15	[signature]	12/31/24 14:15
Anthony Green	12/31 2230	Anthony Green	DEC 31 2024 2047
		[signature] 12/31 2230	1/1/25 0210

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

1/1/25 0210

Form No: 101-02 Rev: (25-Sep-15)