INDOOR AIR QUALITY TESTING SERVICES

COVINGTON MIDDLE SCHOOL

606 SOUTH LEXINGTON AVENUE
COVINGTON, VIRGINIA 24426

ECS PROJECT NO. 47:20796

FOR: ALLEGHANY HIGHLANDS SCHOOL BOARD

MARCH 3, 2025

March 3, 2025

Alleghany Highlands School Board
100 Central Circle
Low Moor, Virginia 24457

ECS Project No. 47:20796

Reference: Indoor Air Quality Testing Services, Covington Middle School, 606 South Lexington Avenue, Covington, Virginia

Dear Alleghany Highlands School Board:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide Alleghany Highlands School Board (AHSB) with the results of the above referenced Indoor Air Quality Testing Services performed at Covington Middle School located at 606 South Lexington Avenue in Covington, Virginia. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 47:37601-EP and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide AHSB with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Mid-Atlantic, LLC

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1.0 SITE DESCRIPTION

The subject site is Covington Middle School, a multi-story school building located at 606 South Lexington Avenue in Covington, Virginia. Based on the information available, the building consists of 95,459 square feet of space. The building is compromised of the original building that was reportedly constructed in 1939, with major additions in 1962, and building additions and renovations in 1990.

ECS understands that building occupants have reported complaints about unusual odors in certain areas of the building. Additionally, some building occupants have reported the development of adverse symptoms that they believe may be associated with indoor air quality at the subject site.

Indoor Air Quality Concerns;

ECS was informed that on January 31, 2025, students at Covington Middle School were evacuated after an odor was detected in the school. The odor was noted to be "unrecognizable" although it was reported to ECS that the odor was similar to an ammonia type smell. The odor was allegedly detected nearest to Room 306; there was also a reported ammonia odor in Room 202. ECS was also informed individuals associated with the school had elevated CO levels through medical examination although the levels were not reported. ECS was informed that the Health Department is looking at each case individually for other potential sources of exposure.

Investigation by the Fire Department and other emergency response personnel reportedly did not find any obvious concerns with the exception of one exhaust stack in the kitchen associated with a gas fired oven. ECS was informed that CO levels were not elevated in the kitchen however, when the fire department probed the exhaust stack for the oven, they reported elevated CO levels in the exhaust. As a pre-caution the oven unit was removed. ECS checked the exhaust ventilation system using a smoke tube for a sister oven located right next to the one removed; The exhaust system appeared to be functioning properly. There was no indication that exhaust fumes were being generated into the kitchen space.

In response to these complaints, ECS was requested to visit the site and perform baseline indoor air quality testing and to follow-up on the concerns reported for both carbon monoxide and the reported ammonia smell. ECS visited the site on February 14, 2025 and February 17, 2025 to complete the survey and perform visual observations and testing.

2.0 PURPOSE

The purpose of the Indoor Air Quality Testing Services was to perform a non-invasive assessment of baseline indoor air quality (IAQ) parameters and test for common contaminants to identify factors that could lead to poor indoor air quality. The assessment included a visual survey and limited smoke tracing survey; screening the school rooms for carbon monoxide (CO) and carbon dioxide (CO2); collecting temperature and relative humidity readings to identify baseline atmospheric characteristics inside the building; collect fungal spore-trap air samples in areas throughout the building; perform direct-read moisture testing for selected building materials in suspect areas; and, collect aldehyde profile samples within specified areas of the building based on building occupant reports of an "ammonia" odor.

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by guidelines and industry standards for general indoor air quality.

3.0 VISUAL SCREENING AND SMOKE TESTING

The visual survey and general air quality profile review included a cursory walkthrough of each classroom and other functionally distinct common areas (such as the gym and cafeteria) to assess possible items/conditions of concern regarding indoor air quality. The visual survey included observations for floor drains, bathroom exhausts, chemical supply closets/janitorial rooms, general assessment of the ventilation system (with respect to the overall distribution of air), and assessment of potential sources of contamination. ECS also interviewed building facilities personnel at the project site to explain the operation of the ventilation systems serving the school.

ECS conducted a smoke tracing survey in specified areas of the building to assess airflow patterns and identify possible routes of contaminant entry. Based on our initial observations, it appears that there is no mechanically provided fresh air into the building. Additionally, ECS did not observe that the exhaust systems in the restrooms or other custodial closets were functioning properly.

ECS notes that this survey was generally qualitative.

4.0 TEMPERATURE, RELATIVE HUMIDITY, CARBON MONOXIDE, AND CARBON DIOXIDE

Temperature and Relative Humidity (RH):

The key to understanding humidity is that warmer air can contain greater quantities of moisture than cooler air. Relative humidity is defined as the ratio of the amount of moisture contained in the air to the maximum amount of moisture the air can contain at that temperature. The dew point temperature is defined as the temperature at which the amount of moisture in the air reaches saturation. The dew point is a more accurate indication of the actual amount of moisture in the air, because it is independent of temperature. The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) has published a standard for ventilated buildings. *ANSI/ASHRAE Standard 62.1-2019, Ventilation for Acceptable Air Quality* specifies that indoor humidity should be maintained below 60 degrees Fahrenheit (°F) dew point temperature. The EPA recommends that indoor relative humidity be maintained below 60%, ideally 30-50%, to prevent mold growth. The *OSHA Technical Manual,* Section III, Chapter 2 for Indoor Air Quality Investigations specifies a thermal comfort range of 68°F to 76°F and a relative humidity range of 20% to 60% to maximize comfort for all occupants.

Relative humidity within the building was observed not to be elevated and the temperature readings collected throughout the building appeared to be within a typical range for this building type.

Carbon Monoxide and Cardon Dioxide:

ECS walked through the school and collected CO and CO2 readings throughout the building. Carbon monoxide (CO) is a colorless, odorless gas that may cause mild effects at lower levels that are often mistaken for the flu, including headaches and nausea. At high levels, CO gas can be lethal. It is found indoors as a result of combustion devices not properly vented to the outdoors, such as engines, natural gas appliances, furnaces, and wood stoves or fireplaces. The US Environmental Protection Agency (EPA) National Ambient Air Quality Standard (NAAQS) for CO is 9 ppm as an eight hour average. ASHRAE has adopted this level as a standard for indoor air quality, not to be exceeded at any time. The OSHA permissible exposure limit (PEL) for carbon monoxide is 50 ppm as an eight hour TWA. Concentrations exceeding 1,200 ppm are immediately dangerous to life and health.

Carbon dioxide (CO_2) is a common compound emitted from human respiration and combustion sources. Elevated levels within a building typically indicate inadequate ventilation or lack of air exchange rates. These conditions may be indicative of the buildup of a variety of contaminants that can cause discomfort in individuals. The OSHA Technical Manual for IAQ assessments references a NIOSH report that levels greater than 1,000 parts per million (ppm) indicate inadequate ventilation rates. These levels do not indicate harmful conditions, but promotes conditions that maximize comfort for most occupants. The OSHA Permissible Exposure Limit (PEL) for CO_2 is 5,000 ppm as an eight hour time-weighted average (TWA).

No elevations of either gas were noted in the school. The school was operating normally with the exception of no teachers or students present in the school at the time of visit, which would not have effected CO levels. A few members of the maintenance staff were present onsite during our visit to assist with accessing areas of the building.

The following table summarizes the indoor air temperature, relative humidity, carbon monoxide, and carbon dioxide readings collected by ECS during this assessment.

4.1 Readings: Temperature, Relative Humidity, Carbon Monoxide, and Carbon Dioxide

Location	Relative Humidity (%)	Temperature (ºF)	Carbon Monoxide (ppm)	Carbon Dioxide (ppm)
First Floor				
Exterior	32.4	47.2	0.5	444
Cafeteria	31.7	57.8	0.1	547
Kitchen	39.0	66.9	0.0	529
by the Sewer Line (Kitchen)	43.0	66.7	0.0	563
Cafeteria Office	39.1	61.6	0.0	458
Kitchen Bathroom	41.2	67.9	0.0	479
Kitchen Storage	35.2	61.4	0.0	443
Custodial Storage (Kitchen)	26.0	60.1	0.8	482
Dish Wash Room (Kitchen)	41.0	62.6	0.0	537

Band Room	33.4	64.4	0.0	489
Room off Brand Room "One"	28.0	69.2	0.0	533
One Storage	28.4	69.5	0.0	610
Main Office	26.4	71.4	0.1	481
Guidance (Main Office)	27.3	69.8	0.1	508
Work Room (Main Office)	27.9	70.1	0.0	502
SRO (Main Office)	27.5	71.1	0.1	490
Counseling (Main Office)	28.2	68.8	0.0	472
Head Counseling (Main Office)	28.9	69.3	0.0	542
Conference Room (Main Office)	28.0	70.4	0.0	553
Assistant Principal (Main Office)	28.0	70.6	0.1	499
Principals Office	25.7	72.7	0.3	570
Teachers Lounge	26.6	71.3	0.3	495
Room 104	26.9	71.8	0.3	507
Foyer	26.5	68.8	0.0	480
Lobby	26.3	69.1	0.0	495
Auditorium	26.4	72.2	0.0	574
Stage	25.0	72.2	0.0	624
Dressing Room	25.3	72.5	0.2	586
Gymnasium	29.1	64.7	0.0	440
Weight Room	27.2	71.4	0.0	468
Gym Foyer	19.36	70.8	0.8	430
Team Room/Laundry	21.3	67.7	0.0	470
Room 105	29.2	69.2	0.0	442
Room 106	24.4	69.2	0.4	431
Room 107	23.1	69.7	0.0	434
Room 108	21.7	70.9	0.0	466
Boiler Room	21.4	70.9	0.7	438
Room 109	23.0	70.1	0.0	446
Room 110	25.9	69.8	0.0	436
Room 111	22.0	70.7	0.0	498
Room 112	27.0	70.0	0.0	449
Room 113	26.3	69.2	0.0	444
Room 114	28.1	69.3	0.0	442
Second Floor				
Library	34.0	73.5	0.6	545
Video Room (Room 206)	29.5	73.1	0.2	542
Library Office (Clinic)	26.3	73.5	0.1	566

Control Room	24.9	73.3	0.4	629
Men's Restroom	26.3	70.9	0.4	601
Room 200A	25.9	72.6	0.3	546
Room 201	25.9	72.5	0.0	550
Room 202	26.5	73.1	0.1	554
Room 203	29.4	72.9	0.2	553
Room 204	26.8	73.1	0.4	551
Room 207	25.5	72.5	0.3	536
Room 208	24.3	72.7	0.1	441
Room 209	23.6	72.3	0.1	444
Room 210	23.3	72.2	0.0	449
Room 211	24.3	70.6	0.0	475
Room 212	24.5	71.3	0.0	440
Storage (ISS Room)	23.8	70.4	0.3	474
Room 213	23.8	72.2	0.1	484
Room 214	24.6	72.8	0.1	442
Third Floor				
Room 301	25.6	71.9	0.4	536
Room 302	26.9	71.5	0.3	554
Room 303	29.2	71.8	0.0	526
Room 304	26.6	72.2	0.1	531
Room 305	25.9	72.3	0.2	523
Room 306	27.8	72.1	0.4	533
Room 307	27.6	71.7	0.3	566
Women's Restroom	26.2	72.4	0.1	571
Men's Restroom	27.5	71.8	0.2	643

5.0 LIMITED MOLD AND MOISTURE

ECS measured the moisture content in various building materials, in selected locations, utilizing a Protimeter brand hand-held moisture meter. The instrument may be operated in two independent modes. The non-destructive “search mode” uses radio-frequency induction to detect moisture in a substrate. Using the search mode, the Protimeter is capable of detecting moisture in solid, homogeneous materials at depths up to 10 millimeters (0.39 inches). When operated in search mode, the Protimeter produces qualitative readings (“dry”, “at risk”, “wet”) along with a relative numerical reading corresponding to the appropriate qualitative reading. The Protimeter may also be used in “measure mode” to obtain actual moisture percentage readings in wood and other solid, non-conductive materials. Measurements are taken by inserting the pins of a moisture probe into the material being tested. For wood substrates, the moisture percentage is expressed as “% Moisture Content (MC)”; for other materials, this number is expressed as “% Wood Moisture Equivalent (WME)”. In general, %MC or %WME values of less than 17 are considered “dry”, values greater than or equal to 17 but less than 20 are considered “at risk” for moisture damage, and values of 20 or greater are considered “wet”. Values of greater than 17 % typically are considered at risk for mold growth. This was not a comprehensive moisture mapping survey of all building materials but rather a non-invasive survey of moisture in select areas of specific building materials that may be impacted by moisture.

For air sample collection, a self-contained, battery-operated, high-volume sampling pump and Air-O-Cell cassettes were utilized in sampling for airborne fungal spores. Samples were collected using a calibrated air sampling pump with an airflow of 15 liters/minute for 10 minutes for both interior and exterior samples. The intent of the air sampling is to profile the air in select locations within the building with regard to fungal spore activity. With respect to air sampling for mold spores, the elevation of microbial spore counts within the building can be used as an indicator of the possible presence of microbial growth.

Samples collected were delivered to Environmental Hazards Services, LLC (EHS) located in Richmond, Virginia for analysis. EHS is accredited by the Environmental Microbiology Laboratory Accreditation Program (EMLAP), administered by the American Industrial Hygiene Association. Air samples were reported to the genus or group level according to the laboratory standard quantification procedures.

The analytical results and chain of custody are provided in the Appendices of this report.

As is the case with many assessments of this nature, this evaluation was limited to the areas of the property deemed reasonably accessible by ECS. Reasonable effort was made to identify mold and moisture-impacted areas. However, mold/moisture-impacted areas may remain unidentified. Due to limitations on time and budget, this was not a building wide mold/moisture survey.

5.1 Observations - Mold and Moisture

Based on the visual assessment, data collected during the site visit, and laboratory results of the air samples, ECS presents a summary of observations, laboratory results and findings.

Representative photographs of the observed mold/moisture-impacted areas/materials are attached to this report.

5.1.1 Spore-Trap Samples

Fungal spore-trap air samples were collected from selected areas in the school and outside (for comparison purposes). Representative exterior samples were collected for comparison. The following table summarizes the results of sample analysis reported in spore counts per cubic meter of air.

Spore-Trap Sample Results

Sample Number	Sample Location	Predominant Fungal Spore Concentration (count/cubic meter)
21425KO-1	Exterior 1 - Parking Lot	Cladosporium spores: 6.7 Penicillium/Aspergillus group spores: 27

Sample Number	Sample Location	Predominant Fungal Spore Concentration (count/cubic meter)
21425KO-2	Cafeteria	**Cladosporium spores: 110** **Penicillium/Aspergillus group spores: 210** **Alternaria spores: 13** **Aureobasidium spores: 6.7** **smuts, Periconia, myxomycetes: 13**
21425KO-3	Main Office	Cladosporium spores: 33 Penicillium/Aspergillus group spores: 20
21425KO-4	Hallway - Level 1, Outside Gym and Room 114	Cladosporium spores: 6.7 **Penicillium/Aspergillus group spores: 53** **Epicoccum spores: 6.7**
21425KO-5	Hallway - Level 2, Outside Room 213	Cladosporium spores: 6.7
21425KO-6	Room 202	No fungal spores observed
21425KO-7	Room 302 - Doorway/ Hallway Area	No relevant fungal spores observed
21425KO-8	Room 306	Penicillium/Aspergillus group spores: 6.7
21425KO-9	Hallway - Level 2, Outside Storage Room and Room 207	Cladosporium spores: 6.7 **Stachybotrys: 6.7**
21425KO-10	Exterior 2 - Parking Lot	Cladosporium spores: 60 Penicillium/Aspergillus group spores: 6.7

There are currently no accepted regulatory standards or guidelines with respect to acceptable fungal levels inside buildings. It is important to note however that spore trap measurements can fluctuate rapidly and the readings reported should not be used as a definitive indication that mold and or health hazards related to mold are present or absent. Items in **BOLD** represent fungal spore counts in genera that have higher concentrations indoors when compared to spore counts outdoors.

The laboratory results are attached to this report. In general, industry guidelines recommend that indoor mold spore levels be less than outdoor levels, and that specific fungal genera detected indoors be comparable to and/or less than the number and types of detected outdoor levels. The analytical results from the mold air sampling conducted indicated that the total and/or individual

concentrations of airborne fungal spores reported were generally acceptable when compared to the concentrations from the outdoor samples. A slight elevation was reported for the cafeteria; however, ECS believes this is related to the nature of this type of space (active kitchen with multiple water sources present). Due to the time of year and recent snow events, it would be assumed that comparison background samples would be lower.

5.1.2 Moisture in Building Materials

Utilizing a Protimeter brand moisture meter in the "measure mode", ECS measured the moisture content from selected locations within the areas surveyed for this evaluation.

Elevated relative moisture measurements were noted in Room 111, and the Dressing Room and Dressing Bathroom in the Auditorium. The components impacted consisted of the concrete masonry unit (CMU) walls and the wooden baseboards.

Note: This was not a comprehensive moisture mapping survey and additional moisture impacted materials may be located in concealed areas (e.g. within wall cavities, above solid ceilings, behind fixtures, etc.).

The following table summarizes moisture content readings collected.

Summary of Moisture Readings from Building Materials

Location	Building Component	Substrate Material	Moisture Content (%)
Auditorium - Dressing Room	Walls	CMU Block Walls	100
Auditorium - Dressing Room	Baseboards	Wood	37
Room 111	Wall	CMU Block	84.4

During the site visit ECS also observed several exterior CMU block walls throughout the interior of the building that appeared to have flaking peeling paint and efflorescence, indicative of prior potential moisture intrusion issues; however, none of the CMU blocks probed with the Protimeter indicated a high moisture content with the exception of the Auditorium dressing rooms and Room 111. Active moisture intrusion was also observed however in the basement boiler room for the original building (also reference pictures at the end of this report).

Additionally, ECS observed areas in classrooms and hallways with water damaged plaster ceilings, ceiling tiles and insulated piping above drop ceilings that appeared to have water staining. The plaster ceilings, ceiling tiles and pipe work did not appear to be wet and active water leaks were not noted in these areas. ECS observed ceiling damage potentially from past water leaks in the locker rooms and shower areas within the gymnasium. These areas were also found to be dry when tested with a moisture meter.

6.0 ALDEHYDE PROFILE SAMPLING

ECS collected four aldehyde profiles samples, three of the samples were collected from within the building and one sample was collected along the exterior of the building.

The samples were collected utilizing sample badges and were analyzed by an accredited laboratory, SGS Galson located in Syracuse, New York. SGS Galson participates in the Industrial Hygiene Laboratory Accreditation Program (IHLAP) sponsored by the American Industrial Hygiene Association (AIHA). The sample were analyzed via EPA method OSHA 1007; HPLC/UV (Modified). The collection times for the samples ranged between 236 and 261 minutes. ECS used stationary fans in the rooms where the badges were placed to circulate air.

The following tables summarizes the lab results for the individual sample areas:

6.1 Results: Aldehyde Profile Sampling

20796KO-1 : Exterior	
Parameter	**Concentration (ppm)**
Acetaldehyde	<0.037
Benzaldehyde	<0.026
Butyraldehyde	<0.037
Crotonaldehyde	<0.034
Formaldehyde	<0.020
Isovaleraldehyde	<0.036
Propionaldehyde	<0.035
Valeraldehyde	<0.035

20796KO-2 : Room 202	
Parameter	**Concentration (ppm)**
Acetaldehyde	<0.041
Benzaldehyde	<0.028
Butyraldehyde	<0.040
Crotonaldehyde	<0.037
Formaldehyde	<0.022
Isovaleraldehyde	<0.039
Propionaldehyde	<0.038
Valeraldehyde	<0.038

20796KO-3: Room 306	
Parameter	**Concentration (ppm)**
Acetaldehyde	<0.041
Benzaldehyde	<0.028
Butyraldehyde	<0.040
Crotonaldehyde	<0.038
Formaldehyde	<0.022
Isovaleraldehyde	<0.039
Propionaldehyde	<0.038
Valeraldehyde	<0.038

20796KO-4: Room 111	
Parameter	**Concentration (ppm)**
Acetaldehyde	<0.041
Benzaldehyde	<0.029
Butyraldehyde	<0.041
Crotonaldehyde	<0.038
Formaldehyde	<0.022
Isovaleraldehyde	<0.040
Propionaldehyde	<0.038
Valeraldehyde	<0.039

The laboratory results are attached to this report. In general, all of the levels reported for the constituents sampled were below analytical detection levels and also were below regulatory exposure guidelines, where applicable. ECS compared the results to either the ACGIH TLVs TWA and OSHA PEL, where applicable. During the survey on both days ECS was in the school, we were unable to detect the reported ammonia odors in either Rooms 202 or 306. ECS also looked through both rooms, which appeared to generally be typical classrooms. No particular stored chemicals or others materials (such as art supplies) were observed in the classrooms that could have led to that type of smell being produced.

Based on conversations, there was speculation that the odor may have originated from an outdoor source; However, it would be expected that the odor would have been more wide spread throughout the building, if that was the case. Based on the provided information, the odor was reported localized to those classrooms and was not wide spread. The only conclusion we can arrive at is that is was somehow occupant produced and it quickly dissipated; It was not reproduceable during subsequent investigations by others including the fire department and ECS.

7.0 RECOMMENDATIONS AND FINDINGS

Based on our understanding of the purpose of the Indoor Air Quality Testing Services, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

7.1 General Findings

1) In general the CO and CO2 levels tested throughout the school were within normal ranges during this study. ECS collected readings in each classroom and most of the common spaces such as the gym, auditorium, cafeteria, kitchen etc. Based on our understanding of the incident, it would appear improbable that CO generated in the kitchen would have disseminated throughout the entire school especially with the kitchen exhaust system running. If this has been the case, we would expect the kitchen staff to have been most affected, but to our knowledge, this was not the case. In response to this concern however, it was reported to ECS that maintenance staff have installed CO detectors. For practical purposes, the detectors should be installed adjacent to any combustion sources, such as mechanical rooms, or gas fired appliances. ECS would also note that any hood or exhaust capture

systems that are present in the school have regular inspections (at least annually) to verify that the systems are performing properly and are pulling requisite amount of exhaust air. The ventilation rate should be physically measured.

2) Other parameters tested including aldehydes also appeared to be acceptable. ECS observed that Temperature and Relative Humidity were within normal parameters. No detectable levels of aldehydes were found in air profile sampling in the school and no obvious odors were detected. During the survey, on both days that ECS was in the school, we were unable to observe the reported odors in Rooms 202 or 306. ECS also visually observed each of the classrooms with the maintenance staff, both of which appeared to be typical classrooms - one appears to be a civics classroom and the other appeared to be math or social studies classroom. It was noted that these classrooms had also previously been observed by others including the fire department. No stored chemicals or others materials, such as art supplies, were observed in the classrooms that would have lead to that type of odor reportedly produced. There was speculation that the odor may have originated from an external source, although if that was the case it is anticipated that the odor would have been more wide spread throughout the entire school and to our knowledge the odor was limited to specific two classroom areas. Based on our observations, ECS believes that the odor was likely generated by an occupant and has since dissipated. There does not appear to be any other explanation for this odor.

3) As typical with any school of this age, sporadic water damaged ceiling tiles and other water damaged materials were observed in various locations within the school. ECS observed two active water leaks in classrooms/student occupied areas; Using a moisture meter, ECS was able to show that both of these areas were still wet. One in the dressing room off of the auditorium, and in Room 111. Maintenance staff quickly identified the sources of both leaks and were addressing them while ECS was still onsite. During the survey ECS also observed active water intrusion in the basement boiler room of the original school building (see also attached pictures). As good practice, this should be reviewed and corrected by a building envelope specialist as a long term abatement measure. In general, the mold air samples collected in various locations in the school were acceptable and did not show significant elevations in spore counts although this sampling was limited. ECS observed a slight elevation in the sample collected from the Cafeteria/kitchen; however, it is believed that this may be due to water sources that are typical in kitchen and cafeteria area. It should also be noted that comparison outdoor samples would be expected to show low outdoor spore counts due to the time of year and recent snow events.

4) In walking through the school with the maintenance/facility staff, ECS observed that ventilation to the building was provided by a wide variety of HVAC systems; there is no central cooling system. It was reported that the building HVAC system was renovated in 1989. Classrooms and a number of other areas including the cafeteria are served in general by a ductless split systems and are reliant on natural draft ventilation through windows and doors. Gas fired boilers for the original building and 1961 additions provide heat for those sections. ECS also observed that toilet exhaust and other dedicated exhausts in bathrooms and janitor closets were not functioning. During smoke testing in classrooms, in some instances air seemed to be supplied through HVAC vents and in other cases it was being exhausted.

The concern would be there is no mechanically provided outside air ventilation to the classrooms or other common areas that we can determine. ANSI/ASHRAE Standard 62.1 1989 standard recommends 15 cfm of outdoor air per person (for classrooms). The 1989 standard is higher than

later standards such as the 2004 standard where it was lowered to 10 cfm/per person. However, the actual amount of fresh outside air ventilation being delivered to each classroom presently is unknown and appears to be only natural draft ventilation. Provision of adequate fresh outside air is a key element in maintaining good indoor quality in the school. As a long term abatement measure, ECS recommends review and improvement of the ventilation system for the school. ECS also suggests that maintenance staff (once the school is fully occupied) acquire a Q-Trak and perform a screening survey of the classrooms to evaluate what CO2 levels are once the school is fully occupied. If levels exceed 1000 ppm, this would be a good indication that inadequate outdoor air is being supplied to the classrooms. While the elevated CO2 level is not a health concern, it is a indicator or surrogate to indicate that inadequate fresh outside air is being supplied.

8.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

This survey is not intended to represent an exhaustive research of every potential hazard or condition that may exist, nor does it claim to represent indoor conditions or events that arise after the survey. This report has been prepared in accordance with generally accepted environmental practices. Our conclusions and findings are based, in part, upon information provided to us by others and our site observations. We have not verified the completeness or accuracy of the information provided by others. The scope of services performed was limited to those requested by the Client and does not constitute a full microbial assessment of the site or a comprehensive moisture survey of the site. The data provided in this study is only indicative of conditions sampled at the immediate time of the study. The work performed in conjunction with this assessment and the data developed is intended as a description of available information at the dates and locations given. This report does not warrant against future operations or conditions, nor does it warrant against extant, or future, conditions of a type or at a location not investigated. Because of the nature of this type of work and the difficulties involved in conducting remediation work, ECS cannot guarantee that the methods or recommendations described in this report will eliminate all potential indoor air quality issues. Since performance of the remediation work is also beyond ECS scope of services, ECS also cannot be held responsible for the execution of the remediation work. The reported microbial levels are only reflective of conditions at the time of this test and that microbial populations can vary over time, depending upon a number of conditions, including environmental factors (i.e., temperature and relative humidity). The work performed in conjunction with this assessment and the data developed is intended as a description of available information at the dates and locations given.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.

Appendix I: Site Photographs

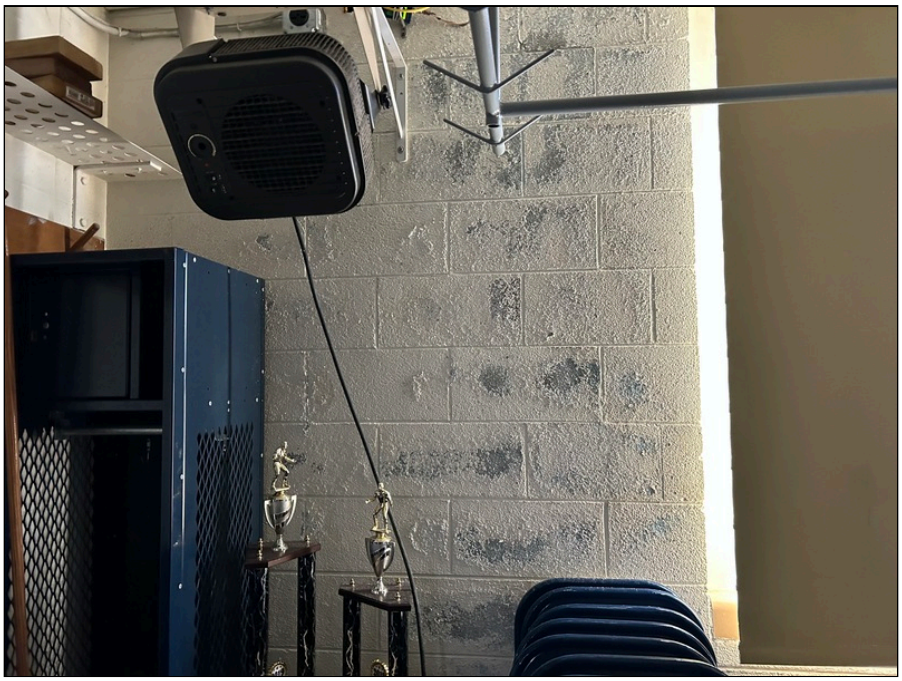
1 - Auditorium Dressing Room - CMU Wall (100% moisture content)

2 - Auditorium Dressing Room - Baseboards Wall (37% moisture content)

3 - Room 111 CMU Block Wall (84.4% Moisture Content)

4 - Locker Room Shower with water damaged ceilings; Areas teste dry,.

5 - Water damaged ceilings in the locker room area; Areas tested dry.



6 - Example of efflorescence on an exterior CMU wall - indicating potential longer term moisture intrusion.

7 - Active water leaks in the boiler room for the original school.

8 - Active water leak in the boiler room for the original school.

Appendix II: Air Spore Trap Results

Non-Viable Spore Trap Analysis Report

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237

Telephone: 800.347.4010

Report Number: 25-02-03134

Received Date: 02/18/2025
Analyzed Date: 02/18/2025
Reported Date: 02/18/2025

Client: ECS Mid-Atlantic - Charlottesville
4004 Hunterstand Court
Suite 102
Charlottesville, VA 22911

Project/Test Address: Covington Middle School, 1606 S. Lexington Ave.; Covington, VA

Client Number:
201022

Fax Number:

Laboratory Results

Lab # :	25-02-03134-001		25-02-03134-002		25-02-03134-003		25-02-03134-004		25-02-03134-005	
Client Sample ID :	21425KO-1		21425KO-2		21425KO-3		21425KO-4		21425KO-5	
Date Collected :	2/14/2025		2/14/2025		2/14/2025		2/14/2025		2/14/2025	
Collection Location :	EXTERIOR 1 PARKING LOT		CAFETERIA		MAIN OFFICE		HALLWAY (LEVEL 1 GYM/ 114)		HALLWAY OUTSIDE ROOM 213	
Sampling Media :	Air-O-Cell		Air-O-Cell		Air-O-Cell		Air-O-Cell		Air-O-Cell	
Analytical Sensitivity (spores/m3) :	6.7		6.7		6.7		6.7		6.7	
Volume (L) :	150		150		150		150		150	
Spore ID	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)
Cladosporium spores	1	6.7	16	110	5	33	1	6.7	1	6.7
Penicillium/Aspergillus group spores	4	27	31	210	3	20	8	53		
Alternaria spores			2	13						
Aureobasidium spores			1	6.7						
Epicoccum spores							1	6.7		
smuts, Periconia, myxomycetes			2	13						
TOTAL SPORES(Spores/m3)		33		350		53		67		6.7
Analyst:	Sloane Cantrell		Sloane Cantrell		Sloane Cantrell		Sloane Cantrell		Sloane Cantrell	

Non-Viable Spore Trap Analysis Report

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237

Telephone: 800.347.4010

Report Number: 25-02-03134

Received Date: 02/18/2025
Analyzed Date: 02/18/2025
Reported Date: 02/18/2025

Client: ECS Mid-Atlantic - Charlottesville
4004 Hunterstand Court
Suite 102
Charlottesville, VA 22911

Project/Test Address: Covington Middle School, 1606 S. Lexington Ave.; Covington, VA

Client Number:
201022

Fax Number:

Laboratory Results

Lab # :	25-02-03134-006		25-02-03134-007		25-02-03134-008		25-02-03134-009		25-02-03134-010	
Client Sample ID :	21425KO-6		21425KO-7		21425KO-8		21425KO-9		21425KO-10	
Date Collected :	2/14/2025		2/14/2025		2/14/2025		2/14/2025		2/14/2025	
Collection Location :	ROOM 202		ROOM 302 DOORWAY/ HALLWAY		ROOM 306		HALL- STORAGE RM/ ROOM 207		EXTERIOR 2- PARKING LOT	
Sampling Media :	Air-O-Cell		Air-O-Cell		Air-O-Cell		Air-O-Cell		Air-O-Cell	
Analytical Sensitivity (spores/m3) :	6.7		6.7		6.7		6.7		6.7	
Volume (L) :	150		150		150		150		150	
Spore ID	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)	Raw Count	Results (Spores/m3)
Cladosporium spores							1	6.7	9	60
Penicillium/Aspergillus group spores					1	6.7			1	6.7
Stachybotrys spores							1	6.7		
No fungal spores observed		See Notes								
No relevant fungal spores observed				See Notes						
TOTAL SPORES(Spores/m3)						6.7		13		67
Analyst:	Felicia Butler		Felicia Butler		Felicia Butler		Felicia Butler		Felicia Butler	

Notes (Sample 006): No fungal spores observed
Notes (Sample 007): No relevant fungal spores observed

Method: Non-Culturable Spore Trap Examination

Reviewed By Authorized Signatory:

Kitana Usher
Microbiology Lab Analyst

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, volume, etc., was provided by the client. The Client is hereby notified that due to the subjective nature of fungal analysis and the growth process of fungal infestation, laboratory samples can and do change over time relative to the originally sampled material. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

ENVIRONMENTAL HAZARDS SERVICES, LLC

Mold Chain of Custody Form

Company Name	ECS Mid Atlantic LLC	Account #	
Company Address	4004 Hunterstand Court #102	City/State/Zip	Charlottesville, VA
Phone	434-973-3232	Email	Kordel@ecslimited.com
Project / Testing Address	Lexington Middle School / 1606 S Lexington Ave, Lexington, VA		
PO Number	47:20796	Collected By	Kathryn Ordel
Collection Date & Time	2/14/25	Outside Air Temp	47 °F
Indoor Air Temp	~70 °F		
Was there any precipitation (rain, sleet or snow) 2 hours of less before taking the samples?	☐ Yes	☑ No	

Turn-Around Time: ○ 5 Day ○ 3 Day ○ 2 Day ◉ 1 Day ○ Same Day / Weekend - Must Call Ahead

SAMPLE TYPE CODES

AIR/ NON VIABLE		SPORE TRAP		SWAB SAMPLE SURFACE	
Bulk	B	Air-O-Cell	AOC	Non Porous	NP
Swab	S	Cyclex D	C	Semi Porous	SP
Bio-Tape	T	BioSiS	B	Porous	P
Wall Check	W	Micro 5	M5		

LAB NUMBER	Client Sample ID	Collection Location	Sample Type	Air Samples: Spore Trap Type	Air Samples: Air Volume (Total Liter)	Swab Samples: Surface Type (NP/SP)	Swab Samples: Area of Mold (Square Feet)	Qualitative Particulate Analysis Additional $10.00 per sample	Comments
1	21425KO-1	Exterior 1 - Parking Lot		AOC	150				
2	21425KO-2	Cafeteria		AOC	150				
3	21425KO-3	Main Office		AOC	150				
4	21425KO-4	Hallway (Level 1 Gym/114)		AOC	150				
5	21425KO-5	Hallway outside Room 213		AOC	150				
6	21425KO-6	Room 202		AOC	150				
7	21425KO-7	Room 302 Doorway / Hallway		AOC	150				
8	21425KO-8	Room 306		AOC	150				
9	21425KO-9	Hall - Storage Rm / Room 207		AOC	150				
10	21425KO-10	Exterior 2 - Parking Lot		AOC	150				
11									
12									
13									

Released By:	Kathryn Ordel	Date:	2/17/25	Time:	945am
Signature:	Kathryn Ordel				

LAB USE ONLY – BELOW THIS LINE

Received By: Felicia Butler

Signature: Felicia Butler

Date: 2/18/25 Time: 11 : 24 ☒ AM ☐ PM

☐ Portal Contact Added

25-02-03134

Due Date:
02/19/2025
(Wednesday)
E

7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010

RESULTS VIA CLIENT PORTAL AVAILABLE @ www.leadlab.com

Appendix III: Aldehyde Sample Results

SGS GALSON

Anan Sauter
ECS Mid-Atlantic LLC
4004 Hunterstand Ct.
Suite 102
Charlottesville, VA 22911

February 20, 2025

Account# 22853

Login# L651098

Dear Anan Sauter:

Enclosed are the analytical results for the samples received by our laboratory on February 18, 2025. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab

Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.
- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.
- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.
- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.
- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).
- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : ECS Mid-Atlantic, LLC
Site : COVINGTON MIDDLE SCHOOL
Project No. : 47:20796:084
Date Sampled : 14-FEB-25
Date Received : 18-FEB-25

Account No.: 22853
Login No. : L651098

Date Analyzed : 19-FEB-25
Report ID : 1475651

Client ID : 20796KO-1 **Lab ID : L651098-1** **Time : 261 minutes**
Date Sampled : 02/14/25 **Date Analyzed : 02/19/25**

Parameter	LOQ ug	Raw ug	Total ug	Conc mg/m3	ppm
Acetaldehyde	0.20	<0.20	<0.21	<0.068	<0.037
Benzaldehyde	0.20	<0.20	<0.20	<0.11	<0.026
Butyraldehyde	0.20	<0.20	<0.23	<0.11	<0.037
Crotonaldehyde	0.20	<0.20	<0.22	<0.098	<0.034
Formaldehyde	0.10	<0.10	<0.10	<0.025	<0.020
Isovaleraldehyde	0.20	<0.20	<0.24	<0.13	<0.036
Propionaldehyde	0.20	<0.20	<0.21	<0.082	<0.035
Valeraldehyde	0.20	<0.20	<0.23	<0.12	<0.035

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Assay 571 Submitted by: JLL Approved by: SMM
Date : 19-FEB-25 Supervisor : SMM

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : ECS Mid-Atlantic, LLC
Site : COVINGTON MIDDLE SCHOOL
Project No. : 47:20796:084
Date Sampled : 14-FEB-25
Date Received : 18-FEB-25

Account No.: 22853
Login No. : L651098

Date Analyzed : 19-FEB-25
Report ID : 1475651

Client ID : 20796KO-2 **Lab ID : L651098-2** **Time : 240 minutes**
Date Sampled : 02/14/25 **Date Analyzed : 02/19/25**

Parameter	LOQ ug	Raw ug	Total ug	Conc mg/m3	ppm
Acetaldehyde	0.20	<0.20	<0.21	<0.073	<0.041
Benzaldehyde	0.20	<0.20	<0.20	<0.12	<0.028
Butyraldehyde	0.20	<0.20	<0.23	<0.12	<0.040
Crotonaldehyde	0.20	<0.20	<0.22	<0.11	<0.037
Formaldehyde	0.10	<0.10	<0.10	<0.027	<0.022
Isovaleraldehyde	0.20	<0.20	<0.24	<0.14	<0.039
Propionaldehyde	0.20	<0.20	<0.21	<0.090	<0.038
Valeraldehyde	0.20	<0.20	<0.23	<0.13	<0.038

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Assay 571 Submitted by: JLL Approved by: SMM
Date : 19-FEB-25 Supervisor : SMM

SGS GALSON

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East Syracuse, NY 13057
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LABORATORY ANALYSIS REPORT

Client : ECS Mid-Atlantic, LLC
Site : COVINGTON MIDDLE SCHOOL
Project No. : 47:20796:084
Date Sampled : 14-FEB-25
Date Received : 18-FEB-25

Account No.: 22853
Login No. : L651098

Date Analyzed : 19-FEB-25
Report ID : 1475651

Client ID : 20796KO-3 **Lab ID : L651098-3** **Time : 238 minutes**
Date Sampled : 02/14/25 **Date Analyzed : 02/19/25**

Parameter	LOQ ug	Raw ug	Total ug	Conc mg/m3	ppm
Acetaldehyde	0.20	<0.20	<0.21	<0.074	<0.041
Benzaldehyde	0.20	<0.20	<0.20	<0.12	<0.028
Butyraldehyde	0.20	<0.20	<0.23	<0.12	<0.040
Crotonaldehyde	0.20	<0.20	<0.22	<0.11	<0.038
Formaldehyde	0.10	<0.10	<0.10	<0.027	<0.022
Isovaleraldehyde	0.20	<0.20	<0.24	<0.14	<0.039
Propionaldehyde	0.20	<0.20	<0.21	<0.090	<0.038
Valeraldehyde	0.20	<0.20	<0.23	<0.14	<0.038

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Assay 571 Submitted by: JLL Approved by: SMM
Date : 19-FEB-25 Supervisor : SMM

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East Syracuse, NY 13057
(315) 432-5227
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LABORATORY ANALYSIS REPORT

Client : ECS Mid-Atlantic, LLC
Site : COVINGTON MIDDLE SCHOOL
Project No. : 47:20796:084
Date Sampled : 14-FEB-25
Date Received : 18-FEB-25

Account No.: 22853
Login No. : L651098

Date Analyzed : 19-FEB-25
Report ID : 1475651

Client ID : 20796KO-4 **Lab ID : L651098-4** **Time : 236 minutes**
Date Sampled : 02/14/25 **Date Analyzed : 02/19/25**

Parameter	LOQ ug	Raw ug	Total ug	Conc mg/m3	ppm
Acetaldehyde	0.20	<0.20	<0.21	<0.075	<0.041
Benzaldehyde	0.20	<0.20	<0.20	<0.12	<0.029
Butyraldehyde	0.20	<0.20	<0.23	<0.12	<0.041
Crotonaldehyde	0.20	<0.20	<0.22	<0.11	<0.038
Formaldehyde	0.10	<0.10	<0.10	<0.027	<0.022
Isovaleraldehyde	0.20	<0.20	<0.24	<0.14	<0.040
Propionaldehyde	0.20	<0.20	<0.21	<0.091	<0.038
Valeraldehyde	0.20	<0.20	<0.23	<0.14	<0.039

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Assay 571 Submitted by: JLL Approved by: SMM
Date : 19-FEB-25 Supervisor : SMM

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LABORATORY FOOTNOTE REPORT

Client Name : ECS Mid-Atlantic, LLC
Site : COVINGTON MIDDLE SCHOOL
Project No. : 47:20796:084

Date Sampled : 14-FEB-25 Account No.: 22853
Date Received: 18-FEB-25 Login No. : L651098
Date Analyzed: 19-FEB-25

L651098 (Report ID: 1475651):
Acetaldehyde - Total ug corrected for a desorption efficiency of 97%.
Benzaldehyde - Total ug corrected for a desorption efficiency of 98%.
Butyraldehyde - Total ug corrected for a desorption efficiency of 86%.
Crotonaldehyde - Total ug corrected for a desorption efficiency of 91%.
Formaldehyde - Total ug corrected for a desorption efficiency of 96%.
Isovaleraldehyde - Total ug corrected for a desorption efficiency of 84%.
Propionaldehyde - Total ug corrected for a desorption efficiency of 97%.
Valeraldehyde - Total ug corrected for a desorption efficiency of 86%.
ACETALDEHYDE results have been corrected for the average background found on the media:
0.0415 ug for lot #11G24 (samples 1-4).
FORMALDEHYDE results have been corrected for the average background found on the media:
0.0191 ug for lot #11G24 (samples 1-4).
SOPs: LC-SOP-4(26)

L651098 (Report ID: 1475651):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Acetaldehyde	+/-11.1%	105%
Benzaldehyde	+/-11.4%	96.1%
Butyraldehyde	+/-16.8%	116%
Crotonaldehyde	+/-16.6%	100%
Formaldehyde	+/-11.1%	102%
Isovaleraldehyde	+/-15.9%	115%
Propionaldehyde	+/-7.6%	100%
Valeraldehyde	+/-9.4%	117%

Parameter	Method
Acetaldehyde	mod. OSHA 1007; HPLC/UV
Benzaldehyde	mod. OSHA 1007; HPLC/UV
Butyraldehyde	mod. OSHA 1007; HPLC/UV
Crotonaldehyde	mod. OSHA 1007; HPLC/UV
Formaldehyde	mod. OSHA 1007; HPLC/UV
Isovaleraldehyde	mod. OSHA 1007; HPLC/UV
Propionaldehyde	mod. OSHA 1007; HPLC/UV
Valeraldehyde	mod. OSHA 1007; HPLC/UV

809514412471
Date:02/18/25
Shipper:FEDEX
Initials:MMM
Prep:UNKNOWN

L651098

CHAIN OF CUSTODY

123

☐	Standard	0%
☐	4 Business Days	35%
☐	3 Business Days	50%
☐	2 Business Days	75%
☐	Next Day by 6pm	100%
☐	Next Day by Noon	150%
☐	Same Day	200%

Client Acct No.: 22853

Original Prep No.: PSY770759

Online COC No.: 316017

Report To: Anan Sauter
Company Name: ECS Mid-Atlantic LLC
Address 1: 4004 Hunterstand Ct.
Address 2:
City, State Zip: Charlottesville, VA 22911
Phone No.: 804-353-6333
Cell No.: 804-659-8415
Email reports to: ASauter@ecslimited.com, Kordel@ecslimited.com
Email EDD to:
Comments:

Invoice To: ~~Mr. Larry Johnson~~
Company Name: ~~ECS Mid-Atlantic LLC~~
Address 1: ~~14026 Thunderbolt Place~~
Address 2: ~~Suite 100~~
Company Name: ~~Chantilly, VA 20151~~
Phone No.: ~~703-471-8400~~
Email Address: ~~ljohnson@ecslimited.com~~
Comments: same as "report to"
P.O. No.:
Payment info.: ☐ I will call SGS to provide credit card info
☐ Card on File (enter the last five digits on the line below)

Comments:

State Sampled: VA

☐ MSHA

Site Name: Covington Middle School

Project: 47:20796:084

Sampled By: Kathryn Ordel

List description of industry or Processes/Interfaces present in sampling area:

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in², cm², ft²	Analysis Requested	Method Reference	Internal Notes
20796KO-1	2/14/25	Assay N571 Aldehyde Badge	10:23-2:44 26/minutes	26/min	Aldehyde Profile	mod. OSHA 1007; HPLC/UV	exterior
20796KO-2	2/14/25	Assay N571 Aldehyde Badge	10:47-247 240minutes	240min	Aldehyde Profile	mod. OSHA 1007; HPLC/UV	Room 202
20796KO-3	2/14/25	Assay N571 Aldehyde Badge	10:51-2:49 238minutes	238min	Aldehyde Profile	mod. OSHA 1007; HPLC/UV	Room 306

☐ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Kathryn Ordel	Kathryn Ordel	2/17/25	930	Received By:	Megan M. McGrath Megan M. McGrath	2/18/25	12:12
Relinquished By:					Received By:			

Samples received after 3pm will be considered as next day's business.

Online COC No. :316017
Prep No. :PSY770759
Account No. :22853
Finalized :02/11/2025 16:26:36

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS North America Inc. 6601 Kirkville Road E. Syracuse, NY 13057, USA t +1 888 432 5227 | +1 315 432 5227 www.galsonlabs.com | www.sgs.com

CHAIN OF CUSTODY

Comments:

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in^2, cm^2, ft^2	Analysis Requested	Method Reference	Internal Notes
20796KO-4	2/14/25	Assay N571 Aldehyde Badge	10:57-2:53 234minutes.	234min.	Aldehyde Profile	mod. OSHA 1007; HPLC/UV	Room 111

☐ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Kathryn Ordel	Kathryn Ordel	2/17/25	730	Received By:	Megan M. McGrath Megan M. McGrath	2/18/25	12:12
Relinquished By:					Received By:			

Samples received after 3pm will be considered as next day's business.

Online COC No. :316017
Prep No. :PSY770759
Account No. :22853
Finalized :02/11/2025 16:26:36

SGS North America Inc. 6601 Kirkville Road E. Syracuse, NY 13057, USA t +1 888 432 5227 | +1 315 432 5227 www.galsonlabs.com | www.sgs.com