March 8, 2021

Mr. Alex Baylor via email: alex.baylor@pgcps.org
Environmental Specialist
Environmental Safety Office
Prince George's County Public Schools
Division of Supporting Services / Building Services
13306 Old Marlboro Pike
Upper Marlboro, MD 20772

RE: Indoor Air Quality (IAQ) and Mold Assessment Services
Prince George's County Public Schools
Annapolis Road Academy Alternative High School
2112 Church Road, Bowie, Maryland 20721
Contract No.: IFB 022-19: Indoor Air Quality Services at Various Locations
Tidewater Project No.: 5419-036

Dear Mr. Baylor:

Tidewater, Inc. (Tidewater) is pleased to present this final report regarding the results of the Indoor Air Quality (IAQ) and Mold Assessment Services conducted by Tidewater at Annapolis Road Academy Alternative High School located at 2112 Church Road in Bowie, Maryland. Tidewater's Project Manager and Certified Industrial Hygienist, Mr. Skanda Abeyesekere MS, CIH, CSP, CHMM, conducted these services on December 2, 2020. Re-sampling of areas with elevated mold concentrations were conducted on February 23, 2021.

The scope of work for the IAQ assessment and mold survey included:

- Inspecting, taking direct read measurements and conducting air sampling at the following select areas of the school: Main Office, Teachers' Lounge, Library, Classroom 1, ISSC Room, Classroom 4, Classroom 9, Classroom 5, and Classroom 8. These areas were inspected for evidence of potential indoor air quality problems (including suspect microbial growth, water damage, chemical use/ storage, drain traps, sources of allergens/ contaminants, etc.) that may contribute to indoor air quality problems;
- Taking direct read air measurements for comfort parameters including temperature (T), relative humidity (RH), carbon dioxide (CO_2), and carbon monoxide (CO) for comparison with standards established by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62.1–2019, *Ventilation for Acceptable Indoor Air Quality*, and The United States Environmental Protection Agency (US EPA) National Ambient Air Quality Standards (NAAQS);
- Taking direct read measurements for Particulate Matter less than 10 microns (PM10) for comparison with standards established by the US EPA NAAQS Final Action (December 7, 2020); and
- Conducting air sampling for microbial spores for total airborne fungal spore analysis.

Visual Observation

The school building was occupied by a limited number of staff and no students were present at the time of the survey because of the on-going COVID-19 pandemic. The majority of the classrooms and other common areas inspected were vacant. The results of Tidewater's visual inspection are presented below:

Main Office

No signs of ongoing water-intrusion problems were observed in the Main office. Furthermore, no odors were detected. A wall-mounted air supply grill in the main office was partially covered due to items placed in front of the supply grill hindering the air flow into the office. The office appeared to be clean and well maintained.

Teacher Lounge

No signs of ongoing water-intrusion problems were observed in the Teacher's Lounge and no odors were detected. The furniture in the lounge was covered to prevent dust accumulation. A wall-mounted air supply grill in the lounge was partially covered due to items stored in front of the grill hindering the air flow into the lounge. Housekeeping appeared to be satisfactory.

Library

No signs of ongoing water-intrusion problems or suspect mold growth were observed in the Library. Furthermore, no odors were detected. Five (5) ceiling mounted air supply grills were operating at the time of the inspection. The grills appeared to be clean and free of dust. One (1) wall-mounted air supply grill was partially covered due to items placed in front of the supply grill hindering the air flow into the library.

Classroom 1

Ceiling-mounted air supply vents were observed in Classroom 1. Some of these supply units had visible surface suspect mold formations at the time of the inspection. No signs of ongoing water-intrusion problems were observed in Classroom 1. Furthermore, no odors were detected.

ISSC Classroom

No signs of ongoing water-intrusion problems were observed in the ISSC classroom. Furthermore, no odors were detected. Numerous ceiling-mounted supply and return air grills were observed in the ISSC Classroom. The grills appeared to be clean and free of dust. The classroom appeared to be clean and well maintained. Housekeeping appeared to be satisfactory.

Classroom 4

No signs of ongoing water-intrusion problems were observed in Classroom 4. Furthermore, no odors were detected. Numerous ceiling-mounted air supply grills were observed, which appeared to be clean and free of dust. The wall-mounted return grills also appeared to be clean. The classroom appeared to be clean and well maintained. Housekeeping appeared to be satisfactory.

Classroom 9

No signs of ongoing water-intrusion problems were observed in Classroom 9. Furthermore, no odors were detected. Numerous ceiling-mounted air supply grills were observed, which appeared

to be clean and free of dust. The wall-mounted return grills also appeared to be clean. The classroom appeared to be clean and well maintained. Housekeeping appeared to be satisfactory.

Classroom 5

No signs of ongoing water-intrusion problems were observed in Classroom 5. Furthermore, no odors were detected. Numerous ceiling-mounted air supply grills were observed, which appeared to be clean and free of dust. The wall-mounted return grills also appeared to be clean. The classroom appeared to be clean and well maintained.

Classroom 8

Tidewater was informed that there had been on-going mold issues in Classroom 8. Visible suspect surface mold was observed on the ceiling-mounted air supply grills. Furthermore, the wall-mounted return air grills also contained visible suspect surface mold. No odors were detected during the inspection. The air conditioning unit was operating at the time of the inspection.

Comfort Parameter Air Testing

During the IAQ assessment, Tidewater obtained temperature (T), relative humidity (RH), carbon dioxide (CO_2), and carbon monoxide (CO) measurements at select locations using a TSI VelociCalc Indoor Air Quality instrument (Model Number 9565-X, Serial Number 9565X 1945 002, Calibration Date: November 8, 2019.) Measurements were taken after allowing the instrument to become acclimated to the ambient temperature and relative humidity for approximately five (5) minutes. Measurements were taken over a 5-minute time period at each designated location and the average concentration was recorded. Samples were obtained for comparison with standards established by the American Society for Heating Refrigeration and Air Conditioning Engineers (ASHRAE) Standard 62.1 – 2019, *Ventilation for Acceptable Indoor Air Quality*. Tidewater also obtained an "outdoor background" measurement in front of the main entrance of the school building for comparison to the interior readings. The results of the IAQ comfort parameter monitoring are provided in Table 1, in **Attachment A.**

According to ASHRAE Standard 62.1 – 2019, *Ventilation for Acceptable Indoor Air Quality,* the temperature range in summer months should be maintained between 73.0°F and 79.0°F for maximum occupant comfort. The ASHRAE standard for temperature for winter months is between 68.0°F and 74.5°F. The indoor temperature levels within the assessed areas on December 2, 2020 ranged between 60.9°F and 69.7°F. The background temperature outside the building was 53.1°F. The temperature levels recorded within most areas monitored were below the ASHRAE lower temperature standard of 68.0°F recommended for winter months. Most areas inspected were vacant at the time of the inspection. Indoor temperature levels fluctuate with the number of occupants present within the work area and will likely increase once the classrooms are occupied by students.

Per the same ASHRAE standard, a maximum relative humidity level of 65.0% or below is recommended to reduce the likelihood of condensation on cold surfaces. Relative humidity levels within the assessed areas on December 2, 2020 ranged between 27.8% and 35.8%. The background relative humidity level outside the building was 23.3%. The relative humidity levels in all areas assessed were below the ASHRAE recommended maximum relative humidity standard of 65.0%.

ASHRAE Standard 62.1 – 2019 recommends that indoor CO_2 levels not exceed 700 ppm above the outdoor background CO_2 level. The CO_2 levels in the assessed areas on December 2, 2020 ranged between 443 ppm to 502 ppm. The background CO_2 level outside the building was 431 ppm. The CO_2 levels within all interior locations assessed did not exceed 700 ppm above the outdoor background CO_2 level of 431 ppm.

The CO levels in all areas assessed on December 2, 2020 were below the maximum standard of 9.0 ppm recommended by the Indoor Air Quality Association (IAQA) for CO in occupied indoor environments.

Particulate Matter Less Than 10 microns (PM10)

During the assessment, Tidewater obtained particulate matter less than 10 microns (PM10) dust particulate measurements at select locations using a TSI® DUST TRAK II™ Aerosol Monitor (Model 8534, Serial Number 8534170101.) Measurements were taken after allowing the device to become acclimated to the ambient temperature and relative humidity for five (5) minutes. Measurements were taken over a 5-minute time period at each sampling location and the average concentration was recorded for comparison with standards established by the US EPA NAAQS Final Action (December 7, 2020.)

Tidewater also obtained an "outdoor background" sample in front of the main entrance of the school building for comparison to the interior readings.

The results of the particulate matter sampling are provided in Table 2, in **Attachment A**.

Based on the EPA NAAQS for Particulate Matter, Final Action (December 7, 2020), the 24-hour primary and secondary exposure standard for particulate matter less than 10 microns (PM10) is 150.0 micrograms per cubic meter of air (µg/m^3) or 0.150 milligrams per cubic meter of air (mg/m^3.) The results of the PM10 analysis indicate that the average PM10 dust concentrations in all assessed areas ranged between 0.070 mg/m^3 and 0.073 mg/m^3. The average PM10 dust concentration in the background sample obtained in front of the main entrance was 0.076 mg/m^3. The PM10 concentrations in all areas assessed were below the EPA 24-hour primary and secondary NAAQS of 0.150 mg/m^3.

Spore Trap Bioaerosol Sampling

Tidewater collected spore trap air samples from the same locations where the comfort parameters were recorded. Tidewater obtained the spore trap samples using Allergenco-D cassettes affixed to a Buck BioAire™ Bioaerosol Sampling Pump (Pump Model Number B520 and Serial Number B153043) calibrated to a flow rate of 15.0 Liters per minute. Each sample was run for a period of five (5) minutes to collect a total sample volume of 75.0 liters of air. Tidewater also obtained an outdoor background sample in front of the main entrance of the school building for comparison to the interior readings.

Once collected, the samples were transported to EMSL Analytical Laboratory (EMSL) located in Beltsville, Maryland for analysis via a standard turn-around time. The samples were transported following rigorous chain-of-custody guidelines to ensure proper handling and delivery of the samples. EMSL is accredited in the American Industrial Hygiene Association (AIHA) Environmental Microbiology Laboratory Accreditation Program (EMLAP) and is a successful participant in AIHA's Environmental Microbiology Proficiency Analytical Testing (EMPAT) program (Laboratory Number 102891.) The samples were analyzed via light microscopy at the

standardized magnification of 600X. This technique does not allow for the differentiation between *Aspergillus* and *Penicillium* spores because they are morphologically identical. Additionally, the technique does not allow for cultivation, or the identification of spores to the species level, except in a few cases.

There are no universally accepted federal or State of Maryland standards for acceptable airborne concentrations of bioaerosols in an indoor occupational environment. In general, indoor airborne concentrations should be less than that found in the outdoor air, with similar species composition. Indoor spore counts significantly greater than those outdoors, or the presence of large numbers of different types of spores indoors that are not found outdoors, may indicate contamination and potential indoor air quality problems.

The total mold spore counts in all assessed areas of the school ranged between 540 spores/m^3 and 16,890 spores/m^3. The total mold spore concentrations in the background sample obtained outdoors was 4,080 spores/m^3. The total mold spore concentrations detected in samples obtained from Classroom 9 (sample # AA-7) and Classroom 8 (sample # AA-9) were (1.2 X – 4.1 X) higher than the total mold spore concentration detected in the background sample (sample # AA-BG.)

Furthermore, the concentration of *Aspergillus/ Penicillium* spores detected in Classroom 9 (sample # AA-7) and Classroom 8 (sample # AA-9) were (4.6 X – 7.6 X) higher than the concentration of A*spergillus/ Penicillium* spores detected in the background sample (Sample # AA-BG.)

A*spergillus/ Penicillium* are the most common mold species that are detected in indoor air samples. Most of the hundreds of sub-species are allergenic with only a few that are toxic. This group of species will grow with only the humidity in the air as its water source.

The significantly elevated concentrations of total mold spores and *Aspergillus/ Penicillium* spores detected in these areas may indicate the presence of a potential indoor source(s) of mold in Classroom 9 and Classroom 8.

These areas were re-sampled on February 23, 2021 following cleanup activities. The results indicated that the total mold spore concentrations and the concentration of *Aspergillus/ Penicillium* spores in Classroom 9 and Classroom 8 were below the background concentration.

The summary of the results for the spore trap sampling are provided in Table 3 in **Attachment A**. The laboratory analytical results, including speciation and chain of custody forms for the spore trap samples are included in **Attachment B**.

CONCLUSIONS

- The following issues were identified during the visual inspections:
  - Main Office, Library, and Teacher's Lounge: Wall-mounted air supply grills were partially covered by items placed in front of supply grills hindering air flow into these areas.
  - Classroom 1: Some ceiling mounted supply unit grills had visible suspect surface mold formations at the time of the inspection.
  - Classroom 8: Visible surface mold was observed on ceiling-mounted supply unit grills. Furthermore, the wall-mounted return air grills also contained visible surface mold.

- The temperature levels recorded within most areas monitored were below the ASHRAE lower temperature standard of 68.0°F recommended for winter months.
- The Relative humidity, CO_2, CO readings and particulate matter less than 10 microns (PM10) recorded within the assessed areas were within industry standards and guidelines;
- The total mold spore concentrations in all interior locations assessed were below the background sample concentration and were also consistent with those observed in the background sample. The results do not indicate elevated levels of airborne total fungal spores in the interior locations sampled.

RECOMMENDATIONS

Based on the results of our visual inspection, Tidewater proposes the following:

- Storage items stored in front of wall-mounted air supply grills in the Main Office, Library, and Teacher's Lounge should be removed to allow adequate air flow into these areas.
- Clean ceiling-mounted air supply and return air grills in Classroom 1 and Classroom 8, and the wall-mounted air supply grills in Classroom 8 with a commercially available (EPA approved) fungicide to remove suspect surface mold.
- Adjust thermostat of the Heating Ventilation and Air Conditioning (HVAC) System supplying air to the classrooms and common areas to achieve a temperature level between 68.0°F and 74.5°F recommended for winter months per ASHRAE Standard 62.1 – 2019, *Ventilation for Acceptable Indoor Air Quality.*
- Ensure that the Heating Ventilation and Air Conditioning (HVAC) system supplying air to all common areas and classrooms is properly balanced per design requirements and are turned on and are operating at all times to ensure adequate ventilation throughout the classrooms and common areas before the school re-opens.
- Maintain good housekeeping practices in all common areas and classrooms. All common area and classrooms floors should be broom cleaned at the end of each day once the school re-opens for students. Furthermore, all horizontal surfaces including desktops, furniture, window sills, and light fixtures should be cleaned on a routine basis to prevent the accumulation of dust.

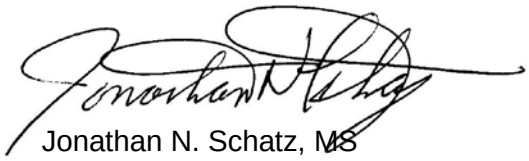
Qualifications

Tidewater endeavored to investigate existing conditions in select areas of Annapolis Road Academy Alternative High School located at 2112 Church Road in Bowie, Maryland as they pertain to indoor air quality and mold contamination. Our conclusions and recommendations are based on observations made on the day of our assessment, laboratory data from the time of the assessment, and information provided by both our Client and the area occupants. Actual conditions vary from day to day throughout the year.

Tidewater appreciates the opportunity to provide Industrial Hygiene consulting services for Prince Georges County Public Schools. Please contact us should any questions arise concerning this report or if we may be of further assistance.

Sincerely,

Tidewater, Inc.



Skanda Abeyesekere, MS, CIH, CSP, CHMM
Project Manager
SA/JNS

Jonathan N. Schatz, MS
Manager, IH Services

Attachments:
Attachment A – Summary of Comfort Parameters, PM10 Particulate Dust, and Microbial Results
Attachment B – Laboratory Reports and Chain of Custody Forms
Attachment C – Instrument Calibration Certificates
Attachment D – Relevant Certifications
Attachment E – Floor Plan with Sampling Locations

APPENDIX A

COMFORT PARAMETERS, PM10 PARTICULATE DUST, AND MICROBIAL RESULTS

Table 1: Indoor Air Quality Comfort Parameters Annapolis Road Academy Alternative High School				
Location	**Temperature (°F)**	**Carbon Dioxide (ppm)**	**Relative Humidity (%)**	**Carbon Monoxide (ppm)**
December 2, 2020				
Main Office	67.4	497	34.4	0.0
Teacher's Lounge	69.7	462	27.8	0.0
Library	67.8	502	34.5	0.0
Classroom 1	65.3	467	33.2	0.0
ISSC Room	66.0	456	30.7	0.0
Classroom 4	64.2	443	32.2	0.0
Classroom 9	61.5	462	35.8	0.0
Classroom 5	61.6	459	35.6	0.0
Classroom 8	60.9	451	31.6	0.0
Background (Outdoors)	53.1	431	23.3	0.0

*Highlighted Areas indicate locations in which temperature levels were below the American Society for Heating Refrigeration and Air Conditioning (ASHRAE) Standard 62.1 – 2019 recommended standards for winter months.

Table 2: Particulate Matter Less than 10 Microns (PM10) Annapolis Road Academy Alternative High School	
Location	**Particulate Matter (PM10)** **Concentration (mg/m^3)**
December 2, 2020	
Main Office	0.071
Teacher's Lounge	0.073
Library	0.070
Classroom 1	0.071
ISSC Room	0.070
Classroom 4	0.070
Classroom 9	0.071
Classroom 5	0.070
Classroom 8	0.070
Background (Outdoors)	0.076

Table 3: Spore Trap Sampling Results Annapolis Road Academy Alternative High School				
December 2, 2020				
Sample Number	**Sample Location**	**Sample Volume (L)**	***Aspergillus Penicillium* Concentration (Counts/m^3)**	**Total Fungi Concentration (Counts/m^3)**
AA-1	Main Office	75.0	400	1,560
AA-2	Teacher's Lounge	75.0	660	1,470
AA-3	Library	75.0	200	540
AA-4	Classroom 1	75.0	1,600	2,210
AA-5	ISSC Room	75.0	2,100	3,010
AA-6	Classroom 4	75.0	1,200	1,630
AA-7	Classroom 9	75.0	**4,200**	**4,630**
AA-8	Classroom 5	75.0	700	840
AA-9	Classroom 8	75.0	**6,590**	**16,890**
AA-BG	Background	75.0	870	4,080

*Highlighted Areas indicate locations with a significantly high concentration of Total mold spores and/ or *Aspergillus/ Penicillium* spores when compared with the background sample.

Table 3: Spore Trap Sampling Results Annapolis Road Academy Alternative High School				
February 23, 2020				
Sample Number	**Sample Location**	**Sample Volume (L)**	***Aspergillus Penicillium* Concentration (Counts/m^3)**	**Total Fungi Concentration (Counts/m^3)**
AA-7	Classroom 9	75.0	420	540
AA-9	Classroom 8	75.0	300	420
AA-BG	Background	75.0	2,800	4,800

APPENDIX B

LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705
Tel/Fax: (301) 937-5700 / (301) 937-5701
http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192011937
Customer ID: TIDE50
Customer PO:
Project ID:

Attention: Skanda Abeyeskere
Tidewater, Inc.
6625 Selnick Drive
Suite A
Elkridge, MD 21075
Project: Annapollis Academy

Phone: (410) 540-8700
Fax: (410) 997-8713
Collected Date: 12/01/2020
Received Date: 12/03/2020
Analyzed Date: 12/09/2020

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	192011937-0001			192011937-0002			192011937-0003		
Client Sample ID:	AA-1			AA-2			AA-3		
Volume (L):	75			75			75		
Sample Location:	Main office			Teacher's Lounge			Library		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	40	2.6	-	-	-	-	-	-
Aspergillus/Penicillium	9	400	25.6	15	660	44.9	4	200	37
Basidiospores	17	740	47.4	5	200	13.6	7	300	55.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	7	300	19.2	14	610	41.5	1	40	7.4
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1	40	2.6	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1	40	2.6	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**36**	**1560**	**100**	**34**	**1470**	**100**	**12**	**540**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	3	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Abubakar Barry, Microbiology Lab Manager
or other Approved Signatory

Initial report from: 12/09/2020 11:32 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

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Phone: (410) 540-8700
Fax: (410) 997-8713
Collected Date: 12/01/2020
Received Date: 12/03/2020
Analyzed Date: 12/09/2020

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	192011937-0004			192011937-0005			192011937-0006		
Client Sample ID:	AA-4			AA-5			AA-6		
Volume (L):	75			75			75		
Sample Location:	Classroom 1			ISSC Room			Classroom 4		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1*	10*	0.5	1	40	1.3	1	40	2.5
Aspergillus/Penicillium	36	1600	72.4	49	2100	69.8	28	1200	73.6
Basidiospores	7	300	13.6	8	300	10	6	300	18.4
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	1	40	1.3	-	-	-
Cladosporium	7	300	13.6	12	520	17.3	2	90	5.5
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	1*	10*	0.3	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**51**	**2210**	**100**	**72**	**3010**	**100**	**37**	**1630**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Abubakar Barry, Microbiology Lab Manager
or other Approved Signatory

High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC-EMLAP Accredited #102891

Initial report from: 12/09/2020 11:32 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

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Collected Date: 12/01/2020
Received Date: 12/03/2020
Analyzed Date: 12/09/2020

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	192011937-0007			192011937-0008			192011937-0009		
Client Sample ID:	AA-7			AA-8			AA-9		
Volume (L):	75			75			75		
Sample Location:	Classroom 9			Classroom 5			Classroom 8		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	40	0.9	-	-	-	-	-	-
Aspergillus/Penicillium	96	4200	90.7	16	700	83.3	151	6590	39
Basidiospores	6	300	6.5	3	100	11.9	3	100	0.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	2	90	1.9	1	40	4.8	233	10200	60.4
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**105**	**4630**	**100**	**20**	**840**	**100**	**387**	**16890**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	1	40	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Abubakar Barry, Microbiology Lab Manager
or other Approved Signatory

Initial report from: 12/09/2020 11:32 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

EMSL Analytical, Inc.

10768 Baltimore Avenue Beltsville, MD 20705
Tel/Fax: (301) 937-5700 / (301) 937-5701
http://www.EMSL.com / beltsvillelab@emsl.com

EMSL Order: 192011937
Customer ID: TIDE50
Customer PO:
Project ID:

Attention: Skanda Abeyeskere
Tidewater, Inc.
6625 Selnick Drive
Suite A
Elkridge, MD 21075
Project: Annapollis Academy

Phone: (410) 540-8700
Fax: (410) 997-8713
Collected Date: 12/01/2020
Received Date: 12/03/2020
Analyzed Date: 12/09/2020

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	**192011937-0010**		
Client Sample ID:	**AA-BG**		
Volume (L):	**75**		
Sample Location:	**Background**		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-
Ascospores	6	300	7.4
Aspergillus/Penicillium	20	870	21.3
Basidiospores	53	2300	56.4
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	12	520	12.7
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	2	90	2.2
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Total Fungi	**93**	**4080**	**100**
Hyphal Fragment	3	100	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	44	-
Analyt. Sensitivity 300x	-	13*	-
Skin Fragments (1-4)	-	1	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Abubakar Barry, Microbiology Lab Manager
or other Approved Signatory

Initial report from: 12/09/2020 11:32 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

OrderID: 192011937

Microbiology Chain of Custody

EMSL Order Number (*Lab Use Only*):

192011937

PHONE:
FAX:

Company: Tidewater Inc	**EMSL-Bill to:** ☐ Different ☐ Same If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 6625 Selnick Drive, Suite A	
City: Elkridge **State/Province:** MD	**Zip/Postal Code:** **Country:**
Report To (Name): Skanda Abeyesekere	**Telephone #:**
Email Address: skanda@tideh2o.net	**Fax #:** **Purchase Order:**
Project Name/Number: Annapolis Academy	**Please Provide Results:** ☐ FAX ☐ E-mail ☐ Mail
U.S. State Samples Taken: Maryland	**Connecticut Samples:** ☐ Commercial ☐ Residential

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour ☐ 6 Hour ☒ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☒ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements*

Non Culturable Air Samples (Spore Traps) – Test Codes

• **M001** Air-O-Cell • **M049** BioSIS • **M030** Micro 5	• **M173** Allegro M2 • **M003** Burkard • **M174** MoldSnap	• **M004** Allergenco • **M043** Cyclex • **M176** Relle Smart	• **M032** Allergenco-D • **M002** Cyclex-d • **M130** Via-Cell	• **M172** Versa Trap

Other Microbiology Test Codes

• **M041** Fungal Direct Examination • **M005** Viable Fungi ID and Count • **M006** Viable Fungi ID and Count (Speciation) • **M007** Culturable Fungi • **M008** Culturable Fungi (Speciation) • **M009** Gram Stain Culturable Bacteria • **M010** Bacterial Count and ID – 3 Most Prominent • **M011** Bacterial Count and ID – 5 Most Prominent • **M013** Sewage Contamination in Buildings	• **M014** Endotoxin Analysis • **M015** Heterotrophic Plate Count • **M180** Real Time Q-PCR-ERMI 36 Panel • **M018** Total Coliform (Membrane Filtration) • **M020** Fecal *Streptococcus* (Membrane Filtration) • **M210-215** *Legionella* Detection • **M026** Recreational Water Screen • **M027** Mycotoxin Analysis	• **M029** *Enterococci* • **M019** Fecal Coliform • **M133** MRSA Analysis • **M028** *Cryptococcus neoformans* Detection • **M120** *Histoplasma capsulatum* Detection • **M033-39** Allergen Testing • **M044** Group Allergen (Cat, Dog, Cockroach, Dustmites) • Other See Analytical Price Guide

Preservation Method (Water):

Name of Sampler: Skanda Abeyesekere **Signature of Sampler:**

Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
Example: A1	Kitchen	Air	M001	75L	1/1/12 4:00 PM
AA-1	Main office	Air	M032	75	12/01/2020
AA-2	Teacher's Lounge				
A-3	Library				
-4	classroom 1				
-5	ISSC Room				
-6	classroom 4				
-7	classroom 9				
-8	classroom 5				
-9	classroom 8				

2020 DEC -3 P 3:05

RECEIVED EMSL ANALYTICAL, INC. BELTSVILLE, MD

Client Sample # (s): 10 **Total # of Samples:** 16

Relinquished (Client): **Date:** 12/02/2020 **Time:**

Received (Client): **Date:** 12/3/20 **Time:** 1506

Comments:

OrderID: 192011937

Microbiology Chain of Custody

EMSL Order Number (*Lab Use Only*):

192011937

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
AA-BG	Background	Air	M032	75-0	12/04/20

****Comments/Special Instructions:**

Page 2 of 2 pages

EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462
Tel/Fax: (610) 828-3102 / (610) 828-3122
http://www.EMSL.com / plymouthmeetinglab@emsl.com

EMSL Order: 182100681
Customer ID: TIDE50
Customer PO:
Project ID:

Attention: Skanda Abeyeskere
Tidewater, Inc.
6625 Selnick Drive
Suite A
Elkridge, MD 21075
Project: PGCPS Annapolis Road Academy

Phone: (410) 540-8700
Fax: (410) 997-8713
Collected Date: 02/23/2021
Received Date: 02/26/2021
Analyzed Date: 02/26/2021

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	182100681-0001			182100681-0002			182100681-0003		
Client Sample ID:	AA-1			AA-9			AA-BG		
Volume (L):	75			75			75		
Sample Location:	Classroom - 9			Classroom - 8			Background		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	1	40	9.5	11	460	9.6
Aspergillus/Penicillium	10	420	77.8	7	300	71.4	66	2800	58.3
Basidiospores	2	80	14.8	2	80	19	34	1400	29.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	7.4	-	-	-	3	100	2.1
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	1	40	0.8
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**13**	**540**	**100**	**10**	**420**	**100**	**115**	**4800**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Kevin Ream, Laboratory Manager
or other Approved Signatory

High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA AIHA-LAP, LLC-EMLAP Accredited #178659

Initial report from: 02/26/2021 02:54 PM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

OrderID: 182100681

Microbiology Chain of Custody

EMSL Order Number *(Lab Use Only)*

182100681

PHONE:
FAX:

Company: Tidewater Inc.	**EMSL-Bill to:** ☐ Different ☐ Same If Bill to is Different note instructions in Comments**
Street: 6625 Selnick Drive, Suite A	*Third Party Billing requires written authorization from third party*
City: Elkridge **State/Province:** MD	**Zip/Postal Code:** **Country:**
Report To (Name): Skanda Abeyesekere	**Telephone #:**
Email Address: skanda@tideh2o.net	**Fax #:** **Purchase Order:**
Project Name/Number: PGCPS Annapolis Road Academy	**Please Provide Results:** ☐ FAX ☐ E-mail ☐ Mail
U.S. State Samples Taken: MD	**Connecticut Samples:** ☐ Commercial ☐ Residential

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour ☐ 6 Hour ■ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide TATs are subject to methodology requirements*

Non Culturable Air Samples (Spore Traps) – Test Codes

• **M001** Air-O-Cell	• **M173** Allegro M2	• **M004** Allergenco	• **M032** Allergenco-D	• **M172** Versa Trap
• **M049** BioSIS	• **M003** Burkard	• **M043** Cyclex	• **M002** Cyclex-d	
• **M030** Micro 5	• **M174** MoldSnap	• **M176** Relle Smart	• **M130** Via-Cell	

Other Microbiology Test Codes

• **M041** Fungal Direct Examination	• **M014** Endotoxin Analysis	• **M029** *Enterococci*
• **M005** Viable Fungi ID and Count	• **M015** Heterotrophic Plate Count	• **M019** Fecal Coliform
• **M006** Viable Fungi ID and Count (Speciation)	• **M180** Real Time Q-PCR-ERMI 36	• **M133** MRSA Analysis
• **M007** Culturable Fungi	• Panel	• **M028** *Cryptococcus neoformans* Detection
• **M008** Culturable Fungi (Speciation)	• **M018** Total Coliform (Membrane Filtration)	• **M120** *Histoplasma capsulatum* Detection
• **M009** Gram Stain Culturable Bacteria	• **M020** Fecal *Streptococcus* (Membrane Filtration)	• **M033-39** Allergen Testing
• **M010** Bacterial Count and ID – 3 Most Prominent	• **M210-215** *Legionella* Detection	• **M044** Group Allergen (Cat, Dog, Cockroach, Dustmites)
• **M011** Bacterial Count and ID – 5 Most Prominent	• **M026** Recreational Water Screen	• **Other** See Analytical Price Guide
• **M013** Sewage Contamination in Buildings	• **M027** Mycotoxin Analysis	

Preservation Method (Water):

Name of Sampler: SKANDA ABEYESEKERE **Signature of Sampler:**

Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
AA-1	Classroom - 9	Air	M032	75-0	02/23/21
AA-9	Classroom - 8	Air	M032	75-0	↓
AA-BG	Background	Air	M032	75-0	

Client Sample # (s): 3 **Total # of Samples:** 3

Relinquished (Client): **Date:** 02/23/2021 **Time:** ~~12:16~~ ~~12:16~~ 1:00 pm

Received (Client): **Date:** 2/26/21 **Time:** 12:30

Comments:

APPENDIX C

INSTRUMENT CALIBRATION CERTIFICATES

TSI P/N 2300157

CERTIFICATE OF CALIBRATION AND TESTING

TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA
Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

ENVIRONMENT CONDITIONS		
TEMPERATURE	74.1 (23.4)	°F (°C)
RELATIVE HUMIDITY	26	%RH
BAROMETRIC PRESSURE	29.26 (990.9)	inHg (hPa)

MODEL	9565-X
SERIAL NUMBER	9565X1945002

☒ AS LEFT ☒ IN TOLERANCE
☐ AS FOUND ☐ OUT OF TOLERANCE

-- CALIBRATION VERIFICATION RESULTS --

THERMO COUPLE^ — **SYSTEM PRESSURE01-01** — *Unit: °F (°C)*

#	STANDARD	MEASURED	ALLOWABLE RANGE	#	STANDARD	MEASURED	ALLOWABLE RANGE
1	71.6 (22.0)	71.6 (22.0)	69.6~73.6 (20.9~23.1)				

BAROMETRIC PRESSURE — **SYSTEM PRESSURE01-01** — *Unit: inHg (hPa)*

#	STANDARD	MEASURED	ALLOWABLE RANGE	#	STANDARD	MEASURED	ALLOWABLE RANGE
1	29.26 (990.9)	29.26 (990.9)	28.67~29.85 (970.9~1010.8)				

^ *Circuit portion of temperature measurement only, not including probe.*

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to NIST, or is derived from accepted values of physical constants. TSI's calibration system is registered to ISO-9001:2015

Measurement Variable	System ID	Last Cal.	Cal. Due	Measurement Variable	System ID	Last Cal.	Cal. Due
DC Voltage	E003299	06-06-19	12-31-20	DC Voltage	E003300	06-06-19	12-31-20
Temperature	E004626	01-09-19	01-31-20	Pressure	E003302	08-07-19	02-29-20
Pressure	E003303	08-26-19	02-29-20				

Rose Germain — CALIBRATED

November 8, 2019 — DATE

Doc. ID CERT_GEN_WCC_TM

TSI P/N 2300157

CERTIFICATE OF CALIBRATION AND TESTING

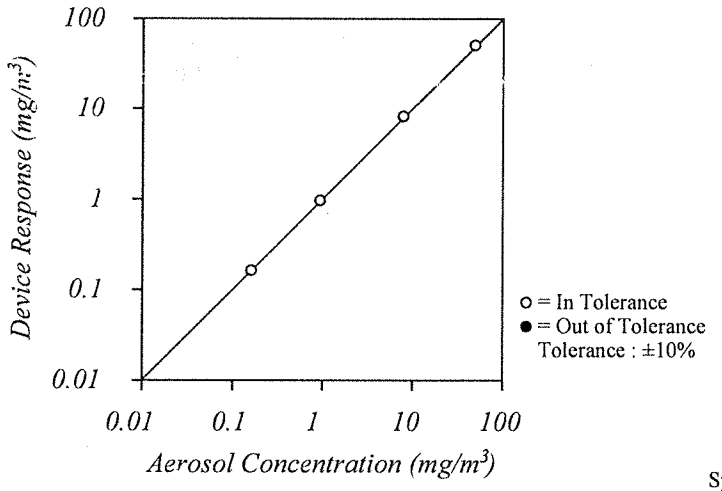
TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA
Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

Environment Conditions		
Temperature	75.83 (24.4)	°F (°C)
Relative Humidity	43.6	%RH
Barometric Pressure	28.93 (979.7)	inHg (hPa)

Model	**8534**
Serial Number	**8534170101**

☒ As Left ☒ In Tolerance
☐ As Found ☐ Out of Tolerance

Concentration Linearity Plot



System ID: DTII01-02

FLOW AND PRESSURE VERIFICATION — SYSTEM DTII01-01

Parameter	Standard	Measured	Allowable Range	Parameter	Standard	Measured	Allowable Range
Flow lpm	3.00	3.03	2.88 ~ 3.12	Pressure kPa	97.8	97.8	92.95 ~ 102.73
Full Flow lpm	N/A	4.54	>3.80				

TSI Incorporated does hereby certify that all materials, components, and workmanship used in the manufacture of this equipment are in strict accordance with the applicable specifications agreed upon by TSI and the customer and with all published specifications. All performance and acceptance tests required under this contract were successfully conducted according to required specifications. There is no NIST standard for optical mass measurements. Calibration of this instrument performed by TSI has been done using emery oil and has been nominally adjusted to respirable mass per standard ISO 12103-1, A1 test dust (Arizona dust). Our calibration ratio is greater than 1.2:1

Measurement Variable	System ID	Last Cal.	Cal. Due
DC Voltage	E003314	01-15-20	01-31-21
Microbalance	M001324	10-03-18	10-31-20
3 um PSL	221853	n/a	n/a
Pressure	E003511	10-04-19	10-31-20
DC Voltage	E003315	01-15-20	01-31-21
Flowmeter	E005922	06-29-20	06-30-21
Microbalance	M001324	10-03-18	10-31-20
1 um PSL	698880	n/a	n/a
10 um PSL	212455	n/a	n/a

Measurement Variable	System ID	Last Cal.	Cal. Due
Photometer	E005612	08-19-20	02-28-21
1 um PSL	698880	n/a	n/a
10 um PSL	212455	n/a	n/a
Flowmeter	E005140	01-09-20	01-31-21
Photometer	E003433	09-15-20	03-31-21
DC Voltage(Keithley)	E002859	06-15-20	06-30-21
Pressure	E005651	07-06-20	07-31-21
3 um PSL	206030	n/a	n/a

David Farrell

Calibrated

September 24, 2020

Date

Certificate of Conformance

(X) Buck BioAire™ ( ) Buck BioSlide™

Serial number: B153043 **Date Issued:** 3-18-20

Flow Calibration

The instrument listed above is in conformance with factory specifications and the flow is set to nominal using a BUCK Calibrator which is N.I.S.T. traceable to A. P. Buck, Inc. Calibration Procedure APB-1, Ver. 6.2.

QA APPROVAL BY: Thomas J. Cravener

A.P. BUCK, INC.
7101 Presidents Drive, Suite 110
Orlando, FL 32809
Phone: 407-851-8602 • Fax: 407-851-8910

BUCK
A.P. BUCK, INC.

APPENDIX D

RELEVANT CERTIFICATIONS

ABIH®

american board of industrial hygiene®

organized to improve the practice of industrial hygiene
proclaims that

Skandakumar Harshanath Abeyesekere

having met all requirements of
education, experience and examination, and
ongoing maintenance,
is hereby certified in the

COMPREHENSIVE PRACTICE
of
INDUSTRIAL HYGIENE

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH®

Certificate Number	**9928 CP**
Awarded:	**May 11, 2011**
Expiration Date:	**December 1, 2021**

Susan Ripple
Chair, ABIH

Chief Executive Officer, ABIH

BOARD OF CERTIFIED SAFETY PROFESSIONALS

affirms that

Skandakumar Abeyesekere

Has applied for, met qualifications, and passed required examination(s) and is hereby authorized to use the designation

Certified Safety Professional®

in Comprehensive Practice

So long as this certificate is not suspended or revoked and the certificant renews this authorization annually and meets Continuance of Certification requirements.

Board of Examiners in witness whereof we have here unto set our hands and affixed the Seal of the Board this 7th Day of April, 2008

Paul S Adams — President

Linda Tapp — Secretary

20110 — CSP No.

INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT

THIS CERTIFIES THAT

Skandakumar Abeyeskere

HAS SUCCESSFULLY MET ALL THE REQUIREMENTS OF EDUCATION, EXPERIENCE AND EXAMINATION, AND IS HEREBY DESIGNATED A

CERTIFIED HAZARDOUS MATERIALS MANAGER
CHMM

INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT IHMM CORPORATE SEAL 1984 DISTRICT OF COLUMBIA

May 13, 2016
DATE OF CERTIFICATION

19053
CREDENTIAL NUMBER

May 31, 2021
CERTIFICATION EXPIRES

M. Patricia Buley
ACTING EXECUTIVE DIRECTOR

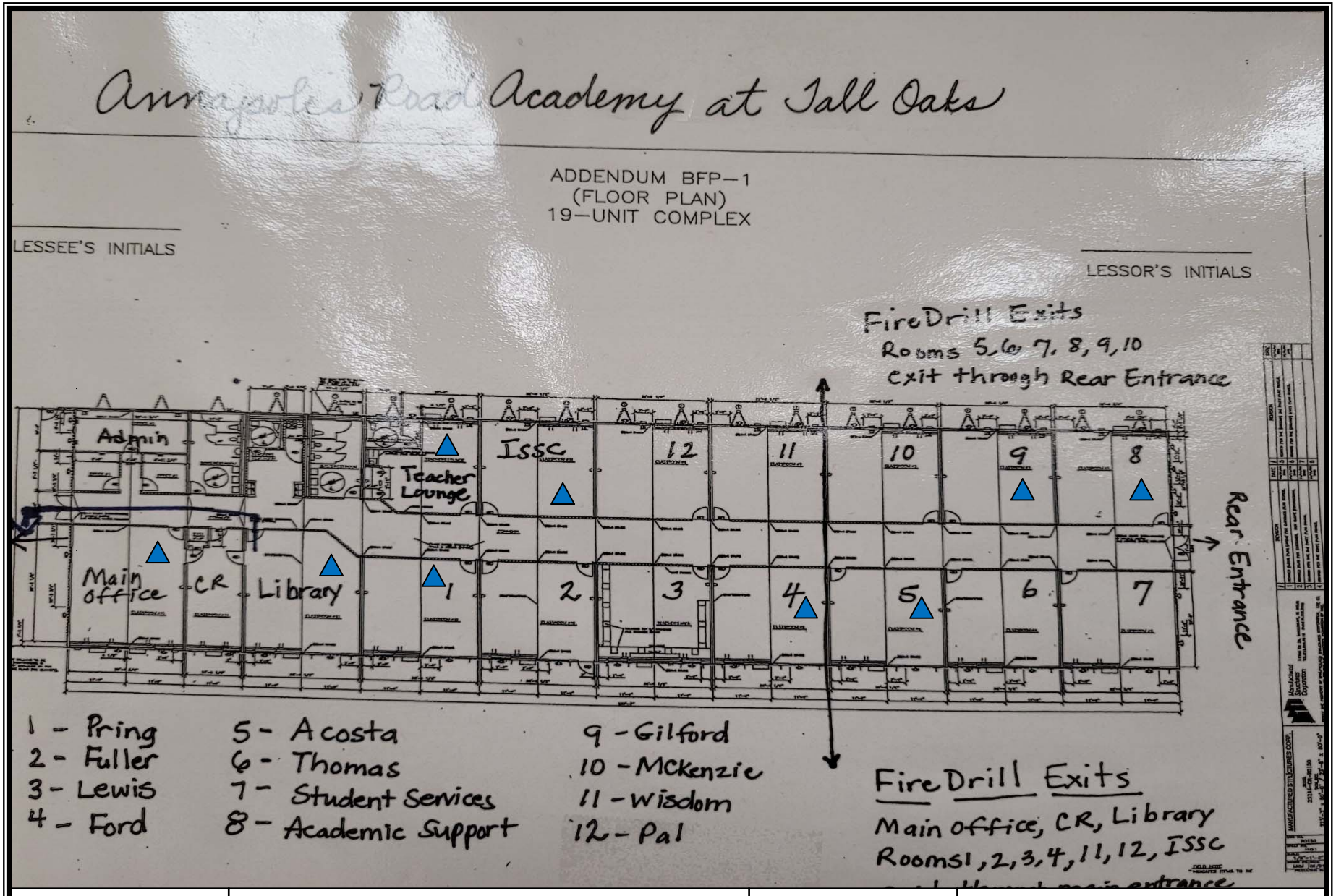
VALID SO LONG AS THIS CREDENTIAL IS RENEWED ACCORDING TO SCHEDULE AND IS NOT OTHERWISE REVOKED.

ANSI Accredited Program PERSONNEL CERTIFICATION

Accredited by the American National Standards Institute and the Council of Engineering and Scientific Specialty Boards

APPENDIX E

FLOOR PLAN WITH SAMPLING LOCATIONS



TIDEWATER INC	**Attachment C** **Annapolis Road Academy Alternative High School** **Floor Plan with Sampling Locations**	Scale: N/A Project #: 5419-036 Date: December 2, 2020	**General Notes** ▲ = Sample Location