Total Environmental Concepts, Inc.
Setting the Standard in Comprehensive Environmental Solutions

15 Park Avenue
Gaithersburg, MD 20877
PHONE: 301-548-0382
FAX: 301-527-0248

Learning to Live • Loving to Learn
ACPS
Alexandria City Public Schools

Indoor Air Quality Assessment Report

at

Francis C. Hammond Middle School
4646 Seminary Road
Alexandria, VA 22304

Report Prepared for:

John Contreras

Alexandria City Public Schools

2601 Cameron Mills Rd, Alexandria, VA 22302

Dated: September 30, 2021

TABLE OF CONTENTS

APPENDICES

Appendix A: Mold Analytical Results

Appendix B: Radon Analytical Results

Appendix C: VOCs (TO+15) Analytical Results

Appendix D: Formaldehyde Analytical Results

Appendix E: 4-PCH Analytical Results

Appendix F: Sampling Locations

Appendix G: Photographs

ABBREVIATIONS AND ACRONYMS

AHU	Air-Handling Unit
AIHA	American Industrial Hygiene Association
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	American Society for Testing and Materials
CO	Carbon Monoxide
CO2	Carbon Dioxide
EMLAP	Environmental Microbiology Laboratory Accreditation Program
HVAC	Heating, Ventilating, And Air-Conditioning
IAQ	Indoor Air Quality
NIST	National Institute for Standards and Technology
NVLAP	National Voluntary Laboratory Accreditation Program
RH	Relative Humidity

Abbreviations involving scientific volume and measurements involving media or water sampling

Spores/m3	Mold spores per cubic meter of air
LPM	Liters Per Minute
NTE	Not to exceed
°F	degree Fahrenheit
PPM	Parts Per Million

1. Executive Summary

Total Environmental Concepts (TEC) was contracted by Alexandria City Public Schools (ACPS) to perform Indoor Air Quality (IAQ) assessments at 19 schools. Douglas MacArthur Elementary was out of service and not assessed.The original list included:

- Alexandria City High School (AC)
- AC Satellie Campus, Central Offices (CO)
- Charles Barrett Elementary School (BC)
- Cora Kelly School for Math (CK)
- **Frances C. Hammond Elementary School (FH)**
- George Mason Elementary School (GM)
- George Mason Elementary School (GW)
- James Polk Elementary School (JP)
- John Adams Elementary School (JA)
- Lyles-Crouch Elementary School (LC)
- Minnie Howard High School (MH)
- Samuel Tucker Elementary School (ST)
- William Ramsey Elementary School (WR)
- Douglas MacAurthur Elementary School (Out of Service)
- Jefferson-Houston Elementary School (JH)
- Ferdinand T. Day Elementary School (FD)
- Patrick Henry Elementary School (PH)
- Mount Vernon Community School (MV)

This IAQ assessment was conducted at Francis C. Hammond Middle School on on Monday, August 23, 2021. ACPS required that the testing to be based on the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) guidelines. ACPS provided site plans and fifteen (15) sampling locations per school. Sampling locations were chosen by ACPS based on internal review of facilities maintenance records, and a review of facilities maintenance related issues. These sampling locations were selected to collect representative IAQ data in these specific areas and to document any areas of potential concern observed during the site assessment. Representative photographs can be found in Appendix G. As such, ACPS required that TEC test for the following major indoor air pollutants:

- Radon
- Mold
- TO+15 (VOCs)
- 4-polycyclohexene (4-pch)
- Formaldehyde

In accordance with ASHRAE, TEC also took measurements of the following at each school:

- Carbon Monoxide
- Carbon Dioxide
- Humidity
- Temperature

- Oxygen

Summary of findings and recommendaitons during this limited IAQ investigation:

- **Mold** – TEC conducted site-specific mold sampling outside at Francis C. Hammond Middle School to obtain a baseline of the number and types of fungal spores in the air. This baseline was compared to the spores collected inside at the sampling locations since inside spore counts above baseline, could indicate internal sources of mold.

  Findings:

1. The number of spores in the air were within acceptable ranges in all locations as compared to background outside air mold spore counts.

2. A mold spore ratio anomaly was recorded in the hallway outside of room B229, in room C127, and in Cafeteria 1. These anomalies are most likely caused by open windows and doors and by normal fluctuations in outdoor spore counts. No visible mold was observed.This is not a health issue.

3. Staff near room C212 mentioned issues with mold. No vsible mold was observed.

   None of the other mold sampling results at William Ramsey Elementary School were indicative of mold issues. Photographs can be found in Section 3, Visual Observations.

   Recommendations:

   - Moving forward, any suspected mold growth should be inspected by a qualified professional.
   - Investigate sources of water leaks and any evidence of water staining.
   - Inspect above drop ceilings and replace stained ceiling tiles.
   - Inspect areas around building foundation.
   - A detailed schedule of maintenance, for all HVAC and associated building systems, should be established, and adhered to.

- **Radon** – levels recorded in all locations were less than 4pCi/L, as recommended by EPA and HUD.
- **VOCs** – The levels of volitile organic compounds (VOCs) recorded at each location were within acceptable ranges, when compared to EPA Regional Screening Levels (RSLs).
- **4-pch** – levels recorded during this investigation were within the LEED (Leadership of Energy and Environmental Design) IAQ guideline of 6.5 ug/m3.
- **Formaldehyde** – the levels of formaldehyde recorded at each location were within an acceptable range, compared to EPA Regional Screening Level (RSLs) of 1ug/m3.
- **Carbon monoxide** – concentrations in all areas were less than the EPA and ASHRAE recommended limit of 9 ppm.
- **Carbon dioxide** – concentrations in all tested spaces were less than the ASHRAE limit of 1,092 ppm.
- **RH** – the relative humidity in all tested spaces was within the ASHRAE guidelines of ≤ 67%, and for the purposes of this investigation ≤ 65%. None of the tested locations had a relative humidity greater than 65%.

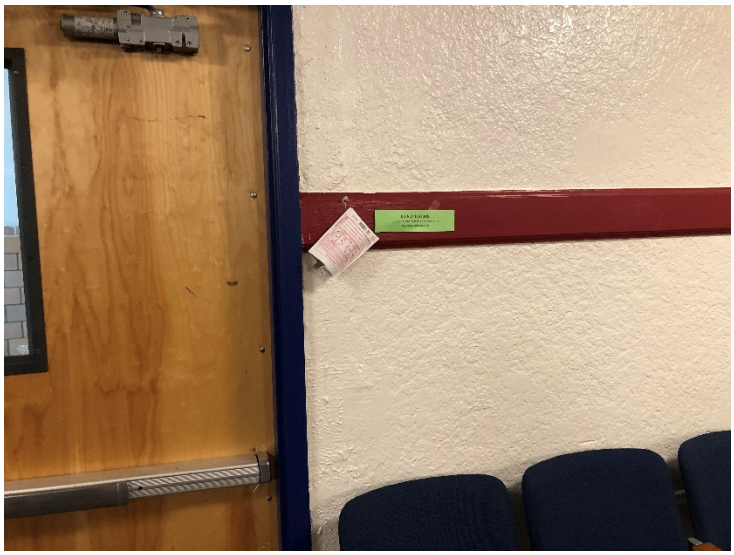
- **Temperature** – none of the tested spaces had a temperatures greater than the ASHRAE recommended summer range of 75°F-80.5°F.

2. Assesment Methods

TEC staff scientists Margaret Stanger, Victoria Powers, and Channing Jackson, conducted IAQ inspections and air sampling on Monday, August 23, 2021, under the direction of Industrial Hygienist Nikki Satari. All air samples were collected three-six feet from floor level, the typical breathing zone for adults.

Mold air samples were collected with a field calibrated Environmental Monitoring Systems High Volume Sampling Pump on Allergenco-D Disposable IAQ Air Monitoring Cassettes at a flow rate of 10 liters per minute for a sample volume of 75 liters during the assessment (photograph below). The Hayes Microbial Consulting laboratory reports are included in Appendix A.

Radon gas samples were collected by securing Air Chek Radon Test Kits (photograph below). Samples were collected within the breathing zone (4-6ft from ground level) at each sample location. In accordance with Air Chek's Radon Test Kit Instructions, kits were secured to walls inside the building and away from, open windows, doors to the outside, or interior air ventilation systems. Sampling time was 72 hours. Radon analytical results can be found in Appendix B.



Formaldehyde gas air samples were collected using static Aldehyde TraceAir II Monitors (photograph below). Samples were secured to surrounding testing equipment to expose the full surface area of the sampling device for the full 4 hours of sampling time. Monitorss were collected after 4 hours and processed for shipment to Phase Separation Science located in Catonsville, MD. Formaldehyde analytical results can be found in Appendix D.

The 4-polycyclohexene (4-PCH) samples were collected in SKC's Anasorb CSC sorbent tubes through Gilian GilAir3 Air Sampling Pumps (photograph below). Pumps were placed within the breathing zone (4-6ft from ground level). Run times were 8 hours or time weighted 4 hour runs. 4-PCH analytical results can be found in Appendix E.

TO+15 (VOCs) samples were collected using ENTECH Instruments 1.4L SUMMA canisters with an ENTECH regulator attachment (photograph below). Canisters were deployed at each location for a run time of 8 hours or a time weighted run time of 4 hours. Internal pressure readings were recorded at the start and end of each sample run time. TO+15 (VOCs) analytical results can be found in Appendix C.

The temperature and relative humidity were taken with the AcuRite Digital Indoor Temperature and Humidity Monitor in the lobby of each school. Teperature and relative humidity readings can be found in Section 5 Mold Sampling Results, below.

Real-time measurements for oxygen, carbon dioxide, carbon monoxide, VOC, hydrogen sulfides were taken with multi-gas detector. These measurements can be found in Section 10 Multi-gas Detector (MSA Altair Multi-gas) Readings. This information can be found in Table 1 below.

3. Visual Observations

Sample Location	August 23, 2021	Visual Observations
Stairwell by Cafeteria 1	Water damage and flooding observed in the tairwell by Cafeteria-1.	

Stairwell by Cafeteria 1	Close up view of observed in the stairwell by Cafeteria-1.		
Stairwell by Cafeteria-1 and Room	Alternative view of water damage observed in the tairwell by Cafeteria-1.		
Stairwell by Cafeteria-1 and Room	Close up view of water damage and mold observed in the tairwell by Cafeteria-1.		

Cafeteria-1	No visible water damage was observed in Cafeteria-1.	
Hallway by Room B229	No visible water damage was observed in the hallway by room B229.	
Room C127	No visible water damage was observed in room C127.	

4. Conditions for Human Occupancy

Conditions for Human Occupancy are addressed in ASHRAE Standard 55-2017. These standards are designed to provide comfort for an estimated 80% of occupants. The standard provides for a temperature range from between approximately 67 and 82 °F. A more specific range based on relative humidity, season, clothing worn, activity levels, and other factors can be determined. For example, the standard does not specify a lower humidity range, but notes that issues of comfort, skin irritation, dry mucous membranes, and static electricity may arise when the relative humidity is less than 30%. ASHRAE Standard 62.1-2016 does recommend an upper limit of 67% humidity to avoid conditions conducive to microbial growth. For the purposes of this investigation, TEC used a conservative upper limit of 65%. The recommended ASHRAE temperature range for schools and office spaces in summer is 75°F-80.5°F.

4.1 Temperature

The recommended ASHRAE temperature range for schools and office spaces in summer is 75°F-80.5°F. The recorded relative humidity in all locations was below 65% and average indoor temperature can be found in Table 2.

4.2 Relative Humidity

ASHRAE Standard 62.1-2016 recommends a relative humidity no greater than 67% to avoid conditions conducive to microbial growth. The relative humidity observed by TEC during this investigation was observed to be below 65% in all locations. Average relative humidity can be found in Table 2.

4.3 Carbon Dioxide

Carbon dioxide (CO2) is a byproduct of combustion burning engines. Generators, furnaces, boilers, idling automobile engines. High CO2 measurements may indictae engine maintenance issues. There were no exceedances in real-time during the IAQ investigation. Complete results can be found in Table 1.

4.4 Carbon Monoxide

Carbon monoxide (CO) is a byproduct of the combustion of fossil fuels. Generators, furnaces, boilers, idling automobile engines, may all produce CO. High CO measurements may indicate engine maintenance issues. There were no exceedances in real-time during the IAQ investigation. Complete results can be found in Table 1.

4.5 Multi-gas Detector Readings

Multi-gas readings were taken at each location to document current conditions at the time of the sampling efforts and to monitor the environment between sampling locations. There were no exceedances in real-time during the IAQ investigation. Complete results can be found in Table 1.

5. Mold Sampling Results

After collection in the field, mold samples were processed for shipment under strict chain of custody and shipped to Hayes Microbial Consulting, in Midlothian, Virginia.

Federal standards for the number of fungal spores that may be present in the indoor environment, don't exist. The widely accepted guideline in the indoor air quality field, requires that the numbers and types of spores that are present in the indoor environment not exceed those that are present outdoors at any given time.

There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination.

Mold is carried indoors through building entrances, open windows, loading docks, foot traffic into buildings and the HVAC system. To thrive indoors, mold requires a food source, proper temperature, and humidity to foster its growth.

There will also be mold spores present in "normal" outdoor environments. In any environment, excess mold growth may arise as a result of excess moisture. Indoors this may indicate water leaks or high indoor humidity.

TEC conducted site-specific mold sampling outside to obtain a baseline spore count. This baseline was compared to inside mold spore counts at the designated sampling locations.

Interior spore counts above baseline readings, may indicate internal sources of mold. This would indicate a requirement for further investigation and potential mitigation.

TEC observed evidence of water intrusion into the building in several locations. Mold spore ratio abnormalities were recorded in Cafeteria 1, in the hallway outside of B229, and in classroom 127. A physical mold swab sample was collected by TEC. Analysis of this sample confirmed the presence of Aspergillus|Penicillium and Cladosporium.

Aspergillus|Penicillium is the most commonly identified fungi in the environment and Cladosporium is also one of the most commonly found mold genera worl-wide. Aspergillus|Penicillium is very common in soil and on plants, and plant material. This group contains common allergens and has been known to cause hypersensitivity issues.

The outdoor numbers of Cladosporium are lower in the winter and are subsequently often relatively high in summer. Cladosporium number are known to spike in the late afternoon and evening. Photographs of these locations can be found above, in Section 3, Visual Observations.

Staff at Frances C. Hammond, present onsite during sampling, also mentioned continued issues with minor flooding, leaks, and suspected mold in these areas.

TEC recommends that ACPS investigate all areas where there are obvious signs of water intrusion. Care should be taken to look above drop ceilings and around the building foundation. Any hidden suspected mold should be tested and verified. The mold in air results do not indicate a need for mold abatement at this time, but conditions may worsen if the issues with water intrusion continue. The observed ratio abnormalities are most like caused by a combination of the normal fluctuation in daily spore counts, and the issues with water intrusion. Mold analytical results can be found in Appendix A.

6. Radon Gas Sampling Results

Radon forms as the result of the radioactive decay of uranium. Uranium is a naturally occurring radioactive by product that occurs when rock and soil breaks down. Some building materials, such as granite, may be a source of radon. Sampling areas were provided by ACPS. This did not allow for TEC to utilize the sampling protocol provided by Air Chek for performing a comprehensive survey. Air Chek Radon Test Kits collection times were a minimum of 72 hours. Test kits were then retrieved and shipped to Air Chek Inc. located in Mills River, NC. Air Chek laboratories are National Institute of Standards and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP), and American Industrial Hygiene Association (AIHA) for Environmental Microbial Laboratory Accreditation Program (EMLAP) certified. Analytical results can be found in Appendix B.

7. Formaldehyde Gas Sampling Results

Sources of formaldehyde are similar to sources of carbon monoxide. They include gas-burning engines and space heaters. Other sources include smoking, household products, pressed wood products, and adhesives. Analytical results can be found in Appendix D.

8. TO+15 (VOC) Sampling Results

Volatile organic compounds (VOCs), are organic chemicals emitted as gases. Carpets, flooring materials, cleaning agents, disinfectants, air fresheners, and vinyl furnishings, may all be sources of VOCs in indoor air. Analytical results can be found in Appendix E.

9. 4-pch Sampling Results

4-polycyclohexene is a common indoor air contaminant most commonly associated with " new-carpet" smell complaints. 4-pch is a byproduct of carpet manufacturing and has been associated with adverse health effects. None of the areas investigated during this study indictated elevated levels of pch. Analytical results can be found in Appendix C.

10. Multi-Gas Detector (MSA Altair Multi-gas) Readings

Multi-gas readings were taken at each location to document current conditions at the time of the sampling efforts and to monitor the environment between sampling locations. There were no exceedances in real-time during the IAQ investigation. Multi-gas results can be found below in Table 1.

Table 1

Multi-Gas Detector Readings				
Location	VOC	CO	OXYGEN	H2S
Cafeteria-2	0.0	0.0	20.9	0.0
Cafeteria-1	0.0	0.0	20.9	0.0
Media Center	0.0	0.0	20.9	0.0
E210	0.1	0.0	20.9	0.0
B205	0.1	0.0	20.9	0.0
D211	0.1	0.0	20.9	0.0
Auditorium	0.0	0.0	20.9	0.0
Main Admin	0.0	0.0	20.9	0.0
C127	0.0	0.0	20.9	0.0
Hall C106	0.1	0.0	20.9	0.0
E109	0.1	0.0	20.9	0.0
Main Gym	0.0	0.0	20.9	0.0
D108	0.1	0.0	20.9	0.0
Hall 159	0.1	0.0	20.9	0.0
Hall B229	0.1	0.0	20.9	0.0

Table 2

Results of Analytes by Location						
Location	Radon	Mold		TO+15 VOCs	4PCH	Formaldehyde
		AVG: 71 F	AVG: 63 %			
Cafeteria-2	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Cafeteria 1	< 4 pCi/L	Spore Ratio Anomaly		< RSL	< 6.5 ug/m3	< RSL
Media Center	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
E210	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
B205	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
D211	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Auditorium	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Main Admin	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
C127	< 4 pCi/L	Spore Ratio Anomaly		< RSL	< 6.5 ug/m3	< RSL
Hall C106	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
E109	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Main Gym	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
D108	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Hall 159	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Hallway B229	< 4 pCi/L	Spore Ratio Anomaly		< RSL	< 6.5 ug/m3	< RSL

11. Quality Control Program

- TEC recognizes the importance of quality assurance (QA) and quality control (QC) measures as they relate to the performance of sample collection and processing.
- To ensure compliance with QA/QC measures, SOPs have been developed for field sample collection techniques, field sample screening procedures, multi-media sampling, and the accurate presentation of findings/reporting.
- All staff are provided these SOPs and are trained in these procedures before conducting work activities. TEC's Program Manager and the on-site PM/QCM will manage the quality control program.
- The PM will work closely with field technicians to ensure the success of the quality control program. All team members will receive copies of and abide by the quality control plan.
- Daily records will be kept of all operations, activities, and tests performed in the quality control program.
- All samples collected during this IAQ assessment were collected, processed, and shipped under the strictest chain of custody (CoC) guidelines.
- All samples were shipped for analysis by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory.

Appendix A: Mold Analytical Results

HAYES MICROBIAL CONSULTING

#21031427

Analysis Report prepared for

Total Environmental Concepts, Inc.

8382 Terminal Road
Suite B
Lorton, VA 22079

Phone: **(571) 289-2173**

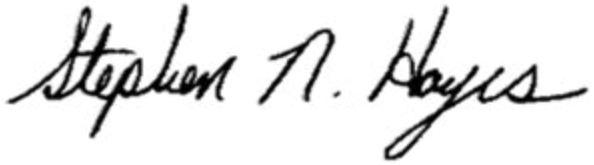
Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

Collected: **August 23, 2021**
Received: **August 24, 2021**
Reported: **August 24, 2021**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 16 samples by FedEx in good condition for this project on August 24th, 2021.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC..

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.



Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419

Lab ID: #188863

DPH License: #PH-0198

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Spore Trap
SOP - HMC#101

Sample Number	1	FH4318596		2	FH 4318601		3	FH 4318589		4	FH 4318600	
Sample Name	FH Cafe 1			FH B205			FH Hallway B229			FH Library		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m³			13 spores/m³			13 spores/m³			13 spores/m³		
Background	2			2			2			2		
Fragments	ND			ND			ND			ND		
Organism	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**
Alternaria												
Ascospores	1	13	2.1%	2	27	40.0%	1	13	5.9%	3	40	75.0%
Aspergillus|Penicillium	5	67	10.4%				16	213	94.1%			
Basidiospores	4	53	8.3%							1	13	25.0%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium	38	507	79.2%	3	40	60.0%						
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Cercospora												
Total	48	640	100%	5	67	100%	17	226	100%	4	53	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Aug 23, 2021** Received: **Aug 24, 2021** Reported: **Aug 24, 2021**

Project Analyst: Shareef Abdelgadir, MS — Date: **08 - 24 - 2021**

Reviewed By: Steve Hayes, BSMT — Date: **08 - 24 - 2021**

HAYES MICROBIAL CONSULTING
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Spore Trap
SOP - HMC#101

Sample Number	5	FH 4318597		6	FH 4318595		7	FH 4318591		8	FH4318611	
Sample Name	FH E210			FH D211			FH Outside			FH Cafe 2		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m³			13 spores/m³			13 spores/m³			13 spores/m³		
Background	2			2			2			2		
Fragments	ND			ND			13/m³			ND		
Organism	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**
Alternaria							2	27	1.5%			
Ascospores							19	253	14.4%	8	107	42.1%
Aspergillus|Penicillium							27	360	20.5%	2	27	10.5%
Basidiospores	3	40	50.0%	1	13	33.3%	21	280	15.9%	6	80	31.6%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium	1	13	16.7%	2	27	66.7%	56	747	42.4%	3	40	15.8%
Curvularia	1	13	16.7%									
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes	1	13	16.7%				1	13	<1%			
Pithomyces							1	13	<1%			
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Cercospora							5	67	3.8%			
Total	6	79	100%	3	40	100%	132	1760	100%	19	254	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Aug 23, 2021** Received: **Aug 24, 2021** Reported: **Aug 24, 2021**

HAYES MICROBIAL CONSULTING

Project Analyst: Shareef Abdelgadir, MS — Date: **08 - 24 - 2021**

Reviewed By: Steve Hayes, BSMT — Date: **08 - 24 - 2021**

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Spore Trap
SOP - HMC#101

Sample Number	9	FH 4315273		10	FH 4318602		11	FH 4318605		12	FH 4318604	
Sample Name	FH C127			FH Avd			FH Main Office			FH Hallway 159		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m³			13 spores/m³			13 spores/m³			13 spores/m³		
Background	2			2			2			2		
Fragments	ND			ND			ND			ND		
Organism	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**
Alternaria												
Ascospores				3	40	21.4%						
Aspergillus|Penicillium	38	507	100.0%	6	80	42.9%						
Basidiospores				3	40	21.4%	1	13	33.3%	1	13	11.1%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium				2	27	14.3%				7	93	77.8%
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes							2	27	66.7%	1	13	11.1%
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Cercospora												
Total	38	507	100%	14	187	100%	3	40	100%	9	119	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Aug 23, 2021** Received: **Aug 24, 2021** Reported: **Aug 24, 2021**

HAYES MICROBIAL CONSULTING

Project Analyst: Shareef Abdelgadir, MS — Date: **08 - 24 - 2021**

Reviewed By: Steve Hayes, BSMT — Date: **08 - 24 - 2021**

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Spore Trap
SOP - HMC#101

Sample Number	13	FH 4318612		14	FH 4318594		15	FH 4318609		16	FH 4315281	
Sample Name	FH D108			FH Gym			FH E109			FH C109		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m³			13 spores/m³			13 spores/m³			13 spores/m³		
Background	2			2			2			2		
Fragments	ND			ND			ND			ND		
Organism	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**
Alternaria												
Ascospores												
Aspergillus|Penicillium	4	53	80.0%							1	13	33.3%
Basidiospores							1	13	25.0%	2	27	66.7%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium	1	13	20.0%	1	13	100.0%	2	27	50.0%			
Curvularia												
Epicoccum							1	13	25.0%			
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Cercospora												
Total	5	66	100%	1	13	100%	4	53	100%	3	40	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Aug 23, 2021** Received: **Aug 24, 2021** Reported: **Aug 24, 2021**

Project Analyst: Shareef Abdelgadir, MS — Date: **08 - 24 - 2021**

Reviewed By: Steve Hayes, BSMT — Date: **08 - 24 - 2021**

HAYES MICROBIAL CONSULTING
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Spore Trap Information

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.
Blanks	Results have not been corrected for field or laboratory blanks.
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 5 and each level is determined as follows: **NBD:** No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD) **1 :** <5% of field occluded. No spores will be uncountable. **2 :** 5-25% of field occluded. **3 :** 25-75% of field occluded. **4 :** 75-90% of field occluded. **5 :** >90% of field occluded. Suggested recollection of sample.
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.
Control Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.
Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality	**Blue:** These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem. **Green:** Although all molds are potential allergens, these are the most common allergens that may be found indoors. **Orange:** The spore count is slightly higher than the outside count and may or may not indicate a source of contamination. **Red:** The spore count is significantly higher than the baseline count and probably indicates a source of contamination. **Violet:** The types of spores found indoors should be similar to the ones that were identified in the baseline sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Organism Descriptions

Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Effects: Health affects are poorly studied, but many are likely to be allergenic.

Aspergillus|Penicillium

Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.

Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

Basidiospores

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

Cercospora

Habitat: Found on wood and decaying plant matter.

Effects: Health effects are poorly studied.

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

Karl Ford
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Francis C Hammond Jr School
4646 Seminary Rd
Alexandria, VA

#21031427

Organism Descriptions

Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.

Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Effects: It is a common allergen. No cases of infection have been reported in humans.

Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Effects: Allergenic properties are poorly studied. No cases of infection in humans.

HAYES MICROBIAL CONSULTING

#21031428

Analysis Report prepared for

Total Environmental Concepts, Inc.

8382 Terminal Road
Suite B
Lorton, VA 22079

Phone: **(571) 289-2173**

ACPS IAQ

Collected: **August 23, 2021**
Received: **August 24, 2021**
Reported: **August 24, 2021**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 1 samples by FedEx in good condition for this project on August 24th, 2021.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC..

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419

Lab ID: #188863

DPH License: #PH-0198

Maggie Stanger
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

ACPS IAQ

#21031428

Direct Analysis

SOP - HMC#102

#1	Swab (1.00 cm2)	Organism	Spore Estimate	Mycelial Estimate
FH-1 - FH-Cafe-Stairs		Cladosporium	Heavy	Many

Maggie Stanger
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

#21031428

Direct Analysis Information

Spore Estimate		Percentages
ND	None Detected	0%
Rare	Less than 10 spores	< 1%
Light	10 - 99 spores	1-10%
Moderate	100 - 999 spores	11-25%
Heavy	1000 - 9999 spores	26-50%
Very Heavy	10000 or greater spores	51-100%

Mycelial Estimate	
ND	None Detected No active growth at site.
Trace	Very small amount of Mycelium Probably no active growth at site.
Few	Some Mycelium Possible active growth at site.
Many	Large amount of Mycelium Probable active growth at site.

Maggie Stanger
Total Environmental Concepts, Inc.
8382 Terminal Road Suite B
Lorton, VA 22079
(571) 289-2173

Organism Descriptions

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

Francis C Hammond Jr School

Total Environmental Concepts, Inc.

Placement Tech	Victoria P	Sample Type	Mold
Placement Date	Aug 23, 2021	Email	kford@tcci.pro
Address	4646 Seminary rd		Alexandria

Sample #	Location/ room	Flow Rate	Sampling Time	Pump Start Time	Pump End Time	Comments
FH 4318596	FH cafe1	10L/m	7.5 m	1013	1021	
FH 4318601	FH B205			1026	1033	
FH 4318589	FH hallway B229			1038	1045	
FH 4318600	FH library			1049	1056	
FH 4318597	FH E210			1100	1107	
FH 4318595	FH D211			1115	1122	
FH 4318591	FH outside			1131	1138	
FH 4318611	FH cafe 2			1008	1016	
FH 4315273	FH C127			1027	1034	
FH 4318602	FH aud			1039	1046	
FH 4318605	FH main office			1053	1000	
FH 4318604	FH hallway 159			1106	1113	
FH 4318612	FH D108			1118	1126	
FH 4318594	FH Gym			1129	1136	
FH 4318609	FH E109			1140	1148	
FH 4315281	FH C109			1154	1202	

HAYES
MICROBIAL CONSULTING

Company: IEC
Address: 8382 Terminal Rd, Suite B
Lorton, VA 22079

[Lab Use Only]

Job Number:	Job Name: ACPS IAQ	Mobile: 240-778-9521	Email: kford@teci.pro
Collector: Maggie S		Note:	
Date Collected: 8/23/2021			

Analysis Type		Analysis Description	Turnaround	Accepted Media Types
Spore Trap	S	Identification & Enumeration of Fungal Spores	24 Hour	Air Cassettes, Impact Slides
	S+	Spore Trap Analysis with Dander, Fiber, and Pollen counts	24 Hour	Air Cassettes, Impact Slides
Direct ID	D	ID & Semi-Quantative Enumeration of spores and mycelium	24 Hour	Bio-Tape, Tape, Swab, Bulk, Agar Plate
	D+	Direct Analysis with Fully Quantitative spore count	24 Hour	Bio-Tape, Tape, Swab, Bulk, Agar Plate
Culture	C1	Identification & Enumeration of Mold only	7 Day	Air Plate, Agar Plate, Swab, Bulk
	C2	Identification & Enumeration of Bacteria only	4 Day	Air Plate, Agar Plate, Swab, Bulk
	C3	Identification & Enumeration of Mold and Bacteria	7 Day	Air Plate, Agar Plate, Swab, Bulk
	C5	Coliform Screen for Sewage Bacteria	2 Day	Agar Plate, Swab, Bulk
Particle	TPA	Total Particulate Analysis, ID & Count (Does Not Include Mold)	24 Hour	Air Cassettes, Impact Slides, Bio-Tape

#	Number	Sample	Analysis	Volume	Notes
1	FH-1	FH-Cafe-Stairs	Mold		water damage. (moisture level 50%)
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Released by:	Date:	Received By:	Date:

Appendix B: Radon Analytical Results

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723707 Result: < 0.3 pCi/l
Location:

Fh Aud 2
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 9.6% 70°F

Kit #: 9723810 Result: < 0.3 pCi/l
Location:

Fh Cafe 1
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 12.9% 70°F

Kit #: 9723830 Result: < 0.3 pCi/l
Location:

Fh Caf 2B
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 5.2% 70°F

Kit #: 9723831 Result: < 0.3 pCi/l
Location:

Fh D108
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 12.0% 70°F

Kit #: 9723835 Result: < 0.3 pCi/l
Location:

Fh Cafe 2
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 13.6% 70°F

Kit #: 9723836 Result: < 0.3 pCi/l
Location:

Fh Cafe 1D
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 13.8% 70°F

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723838 Result: < 0.3 pCi/l
Location:
Fh Gym 1
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 11.5% 70°F

Kit #: 9723841 Result: < 0.3 pCi/l
Location:
Fh hall 159 D101
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 11.8% 70°F

Kit #: 9723842 Result: < 0.3 pCi/l
Location:
Fh main offic
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 10.0% 70°F

Kit #: 9723843 Result: < 0.3 pCi/l
Location:
Fh Gym 2
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 10:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 79 hours 11.5% 70°F

Kit #: 9723844 Result: < 0.3 pCi/l
Location:
Fh D21
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 15.0% 70°F

Kit #: 9723845 Result: < 0.3 pCi/l
Location:
Fh E210
,
Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 12.8% 70°F

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723848 Result: < 0.3 pCi/l
Location:
Fh E109
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 11.0% 70°F

Kit #: 9723850 Result: < 0.3 pCi/l
Location:
Fh Aud 1
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 10.2% 70°F

Kit #: 9723851 Result: < 0.3 pCi/l
Location:
Fh C127
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 12.1% 70°F

Kit #: 9723853 Result: < 0.3 pCi/l
Location:
Fh B205
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 12:00 pm
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 77 hours 12.1% 70°F

Kit #: 9723854 Result: < 0.3 pCi/l
Location:
Fh Media Center
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 11:00 am
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 78 hours 12.1% 70°F

Kit #: 9723859 Result: < 0.3 pCi/l
Location:
Fh B205D
,

Analysis Note :
Analyzed : 2021-08-30 at 10:00 am
Started : 2021-08-23 at 12:00 pm
Ended : 2021-08-26 at 5:00 pm
Hours/MST% : 77 hours 12.6% 70°F

Total Environmental Concepts, Inc.

Placement Tech	Maggie	Sample Type	Radon	Pickup Tech	
Placement Date	8/23/21	Sample Media		Pickup Date	
Address	Francis C. Hammond			Email	Kford@tci.pro

Sample #	Location/ room	SQFT >2000	HVAC Y/N	Window Y/N	Fan Y/N	Time In	Time out	Comment
FH9723810	FH-Cafe-1		Y	Y	N	10:11		
FH9723835	FH-Cafe-2		Y	Y	N	10:03		
FH9723836D	FH-Cafe-1D		Y	Y	N	10:11		
FH9723830B	FH-Cafe-2B		Y	Y	N	10:03		
FH9723837	FH-Hall C106C109		N	N	N	10:14		
FH9723838	FH-GYM-1		Y	Y	N	10:23		
FH9723843	FH-GYM-2		Y	Y	N	10:22		
FH9723831	FHD108		Y	Y	N	10:30		
FH9723841	FH-Hall 159 D101		N	Y	N	10:32		
FH9723842	FH-Main Office		Y	Y	N	10:43		
FH9723850	FH-Auditorium-1		Y	N	N	10:50		
FH9723707	FH-Auditorium-2		Y	N	N	10:50		
FH9723851	FH-C127		Y	Y	N	11:00		
FH9723848	FH-E109		Y	Y	N	11:04		
FH9723845	FH-E210		Y	Y	N	11:13		
FH9723844	FH-D214		Y	Y	N	11:22		
FH9723854	FH-Media Center		Y	Y	N	11:28		
FH9723852	FH-Hall B229 B222		N	Y	N	11:35		
FH9723853	FH-B205		Y	Y	N	11:40		
FH9723857D	FH-B205D		Y	Y	N	11:40		

Appendix C: VOCs (TO+15) Analytical Results

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

September 2, 2021

Karl Ford
Total Environmental Concepts - Lorton
8382 Terminal Road, Suite B
Lorton, VA 22079

Reference: PSS Project No: **21082404**
Project Name: ACPS - Francis Hammond MS
Project Location: 4646 Seminary Rd. Alexandria, VA
Project ID.: 2471.0002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21082404**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on September 28, 2021, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS - Francis Hammond MS

PSS Project No.: 21082404

Project ID: 2471.0002

The following samples were received under chain of custody by Phase Separation Science (PSS) on 08/24/2021 at 11:30 am

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21082404-001	Cafeteria 2	AIR	08/23/21 17:06
21082404-002	Cafeteria 1	AIR	08/23/21 17:10
21082404-003	Main Gymnasium	AIR	08/23/21 17:18
21082404-004	C109 Hallway	AIR	08/23/21 17:26
21082404-005	C127 Classroom	AIR	08/23/21 18:04
21082404-006	Auditorium	AIR	08/23/21 18:08
21082404-007	Admin Office	AIR	08/23/21 17:37
21082404-008	D108 Classroom	AIR	08/23/21 17:48
21082404-009	159 Hallway	AIR	08/23/21 17:44
21082404-010	E109 Classroom	AIR	08/23/21 17:32
21082404-011	B205 Classroom	AIR	08/23/21 18:20
21082404-012	E210 Classroom	AIR	08/23/21 18:27
21082404-013	Media Center	AIR	08/23/21 18:32
21082404-014	D211 Classroom	AIR	08/23/21 18:40
21082404-015	Outside Courtyard	AIR	08/23/21 18:15

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS - Francis Hammond MS

PSS Project No.: 21082404

Standard Flags/Abbreviations:

B	A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C	Results Pending Final Confirmation.
E	The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail	The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J	The target analyte was positively identified below the reporting limit but greater than the MDL.
MDL	This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
ND	Not Detected at or above the reporting limit.
RL	PSS Reporting Limit.
U	Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: D108 Classroom **Date/Time Sampled: 08/23/2021 17:48** **PSS Sample ID: 21082404-008**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	**17**	ug/M3	9.5		1	08/25/21	08/25/21 17:15	1014
Benzene	**0.35**	ug/M3	0.32		1	08/25/21	08/25/21 17:15	1014
Benzyl Chloride	ND	ug/M3	1.0		1	08/25/21	08/25/21 17:15	1014
Bromodichloromethane	ND	ug/M3	1.3		1	08/25/21	08/25/21 17:15	1014
Bromoform	ND	ug/M3	2.1		1	08/25/21	08/25/21 17:15	1014
Bromomethane	ND	ug/M3	0.78		1	08/25/21	08/25/21 17:15	1014
1,3-Butadiene	ND	ug/M3	0.44		1	08/25/21	08/25/21 17:15	1014
2-Butanone (MEK)	**1.5**	ug/M3	1.5		1	08/25/21	08/25/21 17:15	1014
Carbon Disulfide	ND	ug/M3	12		1	08/25/21	08/25/21 17:15	1014
Carbon Tetrachloride	ND	ug/M3	1.3		1	08/25/21	08/25/21 17:15	1014
Chlorobenzene	ND	ug/M3	0.92		1	08/25/21	08/25/21 17:15	1014
Chloroethane	ND	ug/M3	0.53		1	08/25/21	08/25/21 17:15	1014
Chloroform	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014
Chloromethane	**1.0**	ug/M3	0.41		1	08/25/21	08/25/21 17:15	1014
Allyl Chloride (3-Chloropropene)	ND	ug/M3	0.63		1	08/25/21	08/25/21 17:15	1014
Cyclohexane	ND	ug/M3	0.69		1	08/25/21	08/25/21 17:15	1014
Dibromochloromethane	ND	ug/M3	1.7		1	08/25/21	08/25/21 17:15	1014
1,2-Dibromoethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 17:15	1014
1,2-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 17:15	1014
1,3-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 17:15	1014
1,4-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 17:15	1014
Dichlorodifluoromethane	**1.2**	ug/M3	0.99		1	08/25/21	08/25/21 17:15	1014
1,1-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 17:15	1014
1,2-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 17:15	1014
1,1-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 17:15	1014
cis-1,2-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 17:15	1014
trans-1,2-dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 17:15	1014
1,2-Dichloropropane	ND	ug/M3	1.8		1	08/25/21	08/25/21 17:15	1014
cis-1,3-Dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 17:15	1014
trans-1,3-dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 17:15	1014
1,2-Dichlorotetrafluoroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 17:15	1014
1,4-Dioxane (P-Dioxane)	ND	ug/M3	3.6		1	08/25/21	08/25/21 17:15	1014
Ethyl Acetate	ND	ug/M3	0.72		1	08/25/21	08/25/21 17:15	1014
Ethylbenzene	ND	ug/M3	0.43		1	08/25/21	08/25/21 17:15	1014
4-Ethyltoluene	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: D108 Classroom **Date/Time Sampled: 08/23/2021 17:48** **PSS Sample ID: 21082404-008**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
n-Heptane	ND	ug/M3	0.82		1	08/25/21	08/25/21 17:15	1014
Hexachlorobutadiene	ND	ug/M3	2.1		1	08/25/21	08/25/21 17:15	1014
n-Hexane	ND	ug/M3	14		1	08/25/21	08/25/21 17:15	1014
2-Hexanone (MBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 17:15	1014
Isopropylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014
Methylene Chloride	ND	ug/M3	14		1	08/25/21	08/25/21 17:15	1014
4-Methyl-2-Pentanone (MIBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 17:15	1014
Methyl-t-Butyl Ether	ND	ug/M3	0.36		1	08/25/21	08/25/21 17:15	1014
Naphthalene	ND	ug/M3	0.52		1	08/25/21	08/25/21 17:15	1014
Propylene	ND	ug/M3	1.7		1	08/25/21	08/25/21 17:15	1014
n-Propylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014
Styrene	ND	ug/M3	4.3		1	08/25/21	08/25/21 17:15	1014
1,1,2,2-Tetrachloroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 17:15	1014
Tetrachloroethene	ND	ug/M3	1.4		1	08/25/21	08/25/21 17:15	1014
Tetrahydrofuran	ND	ug/M3	0.59		1	08/25/21	08/25/21 17:15	1014
Toluene	**0.87**	ug/M3	0.38		1	08/25/21	08/25/21 17:15	1014
1,2,4-Trichlorobenzene	ND	ug/M3	1.5		1	08/25/21	08/25/21 17:15	1014
1,1,1-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 17:15	1014
1,1,2-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 17:15	1014
Trichloroethene	ND	ug/M3	1.1		1	08/25/21	08/25/21 17:15	1014
Trichlorofluoromethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 17:15	1014
1,1,2-Trichlorotrifluoroethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 17:15	1014
1,2,4-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014
1,3,5-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 17:15	1014
2,2,4-Trimethylpentane	ND	ug/M3	0.93		1	08/25/21	08/25/21 17:15	1014
Vinyl acetate	ND	ug/M3	1.8		1	08/25/21	08/25/21 17:15	1014
Bromoethene	ND	ug/M3	0.87		1	08/25/21	08/25/21 17:15	1014
Vinyl chloride	ND	ug/M3	0.51		1	08/25/21	08/25/21 17:15	1014
m&p-Xylene	ND	ug/M3	0.87		1	08/25/21	08/25/21 17:15	1014
o-Xylene	ND	ug/M3	0.43		1	08/25/21	08/25/21 17:15	1014

Surrogate(s)	*Recovery*		*Limits*				
4-Bromofluorobenzene	*98*	*%*	*87-120*		*1*	*08/25/21*	*08/25/21 17:15*	*1014*

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: 159 Hallway **Date/Time Sampled: 08/23/2021 17:44** **PSS Sample ID: 21082404-009**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	**18**	ug/M3	9.5		1	08/25/21	08/25/21 18:09	1014
Benzene	ND	ug/M3	0.32		1	08/25/21	08/25/21 18:09	1014
Benzyl Chloride	ND	ug/M3	1.0		1	08/25/21	08/25/21 18:09	1014
Bromodichloromethane	ND	ug/M3	1.3		1	08/25/21	08/25/21 18:09	1014
Bromoform	ND	ug/M3	2.1		1	08/25/21	08/25/21 18:09	1014
Bromomethane	ND	ug/M3	0.78		1	08/25/21	08/25/21 18:09	1014
1,3-Butadiene	ND	ug/M3	0.44		1	08/25/21	08/25/21 18:09	1014
2-Butanone (MEK)	**1.6**	ug/M3	1.5		1	08/25/21	08/25/21 18:09	1014
Carbon Disulfide	ND	ug/M3	12		1	08/25/21	08/25/21 18:09	1014
Carbon Tetrachloride	ND	ug/M3	1.3		1	08/25/21	08/25/21 18:09	1014
Chlorobenzene	ND	ug/M3	0.92		1	08/25/21	08/25/21 18:09	1014
Chloroethane	ND	ug/M3	0.53		1	08/25/21	08/25/21 18:09	1014
Chloroform	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014
Chloromethane	**0.93**	ug/M3	0.41		1	08/25/21	08/25/21 18:09	1014
Allyl Chloride (3-Chloropropene)	ND	ug/M3	0.63		1	08/25/21	08/25/21 18:09	1014
Cyclohexane	ND	ug/M3	0.69		1	08/25/21	08/25/21 18:09	1014
Dibromochloromethane	ND	ug/M3	1.7		1	08/25/21	08/25/21 18:09	1014
1,2-Dibromoethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 18:09	1014
1,2-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 18:09	1014
1,3-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 18:09	1014
1,4-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 18:09	1014
Dichlorodifluoromethane	**1.4**	ug/M3	0.99		1	08/25/21	08/25/21 18:09	1014
1,1-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 18:09	1014
1,2-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 18:09	1014
1,1-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 18:09	1014
cis-1,2-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 18:09	1014
trans-1,2-dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 18:09	1014
1,2-Dichloropropane	ND	ug/M3	1.8		1	08/25/21	08/25/21 18:09	1014
cis-1,3-Dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 18:09	1014
trans-1,3-dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 18:09	1014
1,2-Dichlorotetrafluoroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 18:09	1014
1,4-Dioxane (P-Dioxane)	ND	ug/M3	3.6		1	08/25/21	08/25/21 18:09	1014
Ethyl Acetate	ND	ug/M3	0.72		1	08/25/21	08/25/21 18:09	1014
Ethylbenzene	ND	ug/M3	0.43		1	08/25/21	08/25/21 18:09	1014
4-Ethyltoluene	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: 159 Hallway **Date/Time Sampled: 08/23/2021 17:44** **PSS Sample ID: 21082404-009**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
n-Heptane	ND	ug/M3	0.82		1	08/25/21	08/25/21 18:09	1014
Hexachlorobutadiene	ND	ug/M3	2.1		1	08/25/21	08/25/21 18:09	1014
n-Hexane	ND	ug/M3	14		1	08/25/21	08/25/21 18:09	1014
2-Hexanone (MBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 18:09	1014
Isopropylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014
Methylene Chloride	ND	ug/M3	14		1	08/25/21	08/25/21 18:09	1014
4-Methyl-2-Pentanone (MIBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 18:09	1014
Methyl-t-Butyl Ether	ND	ug/M3	0.36		1	08/25/21	08/25/21 18:09	1014
Naphthalene	ND	ug/M3	0.52		1	08/25/21	08/25/21 18:09	1014
Propylene	ND	ug/M3	1.7		1	08/25/21	08/25/21 18:09	1014
n-Propylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014
Styrene	ND	ug/M3	4.3		1	08/25/21	08/25/21 18:09	1014
1,1,2,2-Tetrachloroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 18:09	1014
Tetrachloroethene	ND	ug/M3	1.4		1	08/25/21	08/25/21 18:09	1014
Tetrahydrofuran	ND	ug/M3	0.59		1	08/25/21	08/25/21 18:09	1014
Toluene	**0.75**	ug/M3	0.38		1	08/25/21	08/25/21 18:09	1014
1,2,4-Trichlorobenzene	ND	ug/M3	1.5		1	08/25/21	08/25/21 18:09	1014
1,1,1-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 18:09	1014
1,1,2-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 18:09	1014
Trichloroethene	ND	ug/M3	1.1		1	08/25/21	08/25/21 18:09	1014
Trichlorofluoromethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 18:09	1014
1,1,2-Trichlorotrifluoroethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 18:09	1014
1,2,4-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014
1,3,5-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 18:09	1014
2,2,4-Trimethylpentane	ND	ug/M3	0.93		1	08/25/21	08/25/21 18:09	1014
Vinyl acetate	ND	ug/M3	1.8		1	08/25/21	08/25/21 18:09	1014
Bromoethene	ND	ug/M3	0.87		1	08/25/21	08/25/21 18:09	1014
Vinyl chloride	ND	ug/M3	0.51		1	08/25/21	08/25/21 18:09	1014
m&p-Xylene	ND	ug/M3	0.87		1	08/25/21	08/25/21 18:09	1014
o-Xylene	ND	ug/M3	0.43		1	08/25/21	08/25/21 18:09	1014

Surrogate(s)	*Recovery*		*Limits*				
4-Bromofluorobenzene	*97*	*%*	*87-120*		*1*	*08/25/21*	*08/25/21 18:09*	*1014*

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: Media Center **Date/Time Sampled: 08/23/2021 18:32** **PSS Sample ID: 21082404-013**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	**17**	ug/M3	9.5		1	08/25/21	08/25/21 19:03	1014
Benzene	**0.35**	ug/M3	0.32		1	08/25/21	08/25/21 19:03	1014
Benzyl Chloride	ND	ug/M3	1.0		1	08/25/21	08/25/21 19:03	1014
Bromodichloromethane	ND	ug/M3	1.3		1	08/25/21	08/25/21 19:03	1014
Bromoform	ND	ug/M3	2.1		1	08/25/21	08/25/21 19:03	1014
Bromomethane	ND	ug/M3	0.78		1	08/25/21	08/25/21 19:03	1014
1,3-Butadiene	ND	ug/M3	0.44		1	08/25/21	08/25/21 19:03	1014
2-Butanone (MEK)	**1.6**	ug/M3	1.5		1	08/25/21	08/25/21 19:03	1014
Carbon Disulfide	ND	ug/M3	12		1	08/25/21	08/25/21 19:03	1014
Carbon Tetrachloride	ND	ug/M3	1.3		1	08/25/21	08/25/21 19:03	1014
Chlorobenzene	ND	ug/M3	0.92		1	08/25/21	08/25/21 19:03	1014
Chloroethane	ND	ug/M3	0.53		1	08/25/21	08/25/21 19:03	1014
Chloroform	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014
Chloromethane	**0.78**	ug/M3	0.41		1	08/25/21	08/25/21 19:03	1014
Allyl Chloride (3-Chloropropene)	ND	ug/M3	0.63		1	08/25/21	08/25/21 19:03	1014
Cyclohexane	ND	ug/M3	0.69		1	08/25/21	08/25/21 19:03	1014
Dibromochloromethane	ND	ug/M3	1.7		1	08/25/21	08/25/21 19:03	1014
1,2-Dibromoethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:03	1014
1,2-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:03	1014
1,3-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:03	1014
1,4-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:03	1014
Dichlorodifluoromethane	**1.2**	ug/M3	0.99		1	08/25/21	08/25/21 19:03	1014
1,1-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 19:03	1014
1,2-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 19:03	1014
1,1-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:03	1014
cis-1,2-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:03	1014
trans-1,2-dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:03	1014
1,2-Dichloropropane	ND	ug/M3	1.8		1	08/25/21	08/25/21 19:03	1014
cis-1,3-Dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 19:03	1014
trans-1,3-dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 19:03	1014
1,2-Dichlorotetrafluoroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:03	1014
1,4-Dioxane (P-Dioxane)	ND	ug/M3	3.6		1	08/25/21	08/25/21 19:03	1014
Ethyl Acetate	ND	ug/M3	0.72		1	08/25/21	08/25/21 19:03	1014
Ethylbenzene	ND	ug/M3	0.43		1	08/25/21	08/25/21 19:03	1014
4-Ethyltoluene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: Media Center **Date/Time Sampled: 08/23/2021 18:32** **PSS Sample ID: 21082404-013**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
n-Heptane	ND	ug/M3	0.82		1	08/25/21	08/25/21 19:03	1014
Hexachlorobutadiene	ND	ug/M3	2.1		1	08/25/21	08/25/21 19:03	1014
n-Hexane	ND	ug/M3	14		1	08/25/21	08/25/21 19:03	1014
2-Hexanone (MBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 19:03	1014
Isopropylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014
Methylene Chloride	ND	ug/M3	14		1	08/25/21	08/25/21 19:03	1014
4-Methyl-2-Pentanone (MIBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 19:03	1014
Methyl-t-Butyl Ether	ND	ug/M3	0.36		1	08/25/21	08/25/21 19:03	1014
Naphthalene	**0.58**	ug/M3	0.52		1	08/25/21	08/25/21 19:03	1014
Propylene	ND	ug/M3	1.7		1	08/25/21	08/25/21 19:03	1014
n-Propylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014
Styrene	ND	ug/M3	4.3		1	08/25/21	08/25/21 19:03	1014
1,1,2,2-Tetrachloroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:03	1014
Tetrachloroethene	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:03	1014
Tetrahydrofuran	ND	ug/M3	0.59		1	08/25/21	08/25/21 19:03	1014
Toluene	**1.1**	ug/M3	0.38		1	08/25/21	08/25/21 19:03	1014
1,2,4-Trichlorobenzene	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:03	1014
1,1,1-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:03	1014
1,1,2-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:03	1014
Trichloroethene	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:03	1014
Trichlorofluoromethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:03	1014
1,1,2-Trichlorotrifluoroethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:03	1014
1,2,4-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014
1,3,5-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:03	1014
2,2,4-Trimethylpentane	ND	ug/M3	0.93		1	08/25/21	08/25/21 19:03	1014
Vinyl acetate	ND	ug/M3	1.8		1	08/25/21	08/25/21 19:03	1014
Bromoethene	ND	ug/M3	0.87		1	08/25/21	08/25/21 19:03	1014
Vinyl chloride	ND	ug/M3	0.51		1	08/25/21	08/25/21 19:03	1014
m&p-Xylene	ND	ug/M3	0.87		1	08/25/21	08/25/21 19:03	1014
o-Xylene	ND	ug/M3	0.43		1	08/25/21	08/25/21 19:03	1014

Surrogate(s)	*Recovery*		*Limits*				
4-Bromofluorobenzene	*98*	*%*	*87-120*		*1*	*08/25/21*	*08/25/21 19:03*	*1014*

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: D211 Classroom **Date/Time Sampled: 08/23/2021 18:40** **PSS Sample ID: 21082404-014**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	**16**	ug/M3	9.5		1	08/25/21	08/25/21 19:57	1014
Benzene	ND	ug/M3	0.32		1	08/25/21	08/25/21 19:57	1014
Benzyl Chloride	ND	ug/M3	1.0		1	08/25/21	08/25/21 19:57	1014
Bromodichloromethane	ND	ug/M3	1.3		1	08/25/21	08/25/21 19:57	1014
Bromoform	ND	ug/M3	2.1		1	08/25/21	08/25/21 19:57	1014
Bromomethane	ND	ug/M3	0.78		1	08/25/21	08/25/21 19:57	1014
1,3-Butadiene	ND	ug/M3	0.44		1	08/25/21	08/25/21 19:57	1014
2-Butanone (MEK)	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:57	1014
Carbon Disulfide	ND	ug/M3	12		1	08/25/21	08/25/21 19:57	1014
Carbon Tetrachloride	ND	ug/M3	1.3		1	08/25/21	08/25/21 19:57	1014
Chlorobenzene	ND	ug/M3	0.92		1	08/25/21	08/25/21 19:57	1014
Chloroethane	ND	ug/M3	0.53		1	08/25/21	08/25/21 19:57	1014
Chloroform	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014
Chloromethane	**0.89**	ug/M3	0.41		1	08/25/21	08/25/21 19:57	1014
Allyl Chloride (3-Chloropropene)	ND	ug/M3	0.63		1	08/25/21	08/25/21 19:57	1014
Cyclohexane	ND	ug/M3	0.69		1	08/25/21	08/25/21 19:57	1014
Dibromochloromethane	ND	ug/M3	1.7		1	08/25/21	08/25/21 19:57	1014
1,2-Dibromoethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:57	1014
1,2-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:57	1014
1,3-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:57	1014
1,4-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 19:57	1014
Dichlorodifluoromethane	**1.3**	ug/M3	0.99		1	08/25/21	08/25/21 19:57	1014
1,1-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 19:57	1014
1,2-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 19:57	1014
1,1-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:57	1014
cis-1,2-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:57	1014
trans-1,2-dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 19:57	1014
1,2-Dichloropropane	ND	ug/M3	1.8		1	08/25/21	08/25/21 19:57	1014
cis-1,3-Dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 19:57	1014
trans-1,3-dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 19:57	1014
1,2-Dichlorotetrafluoroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:57	1014
1,4-Dioxane (P-Dioxane)	ND	ug/M3	3.6		1	08/25/21	08/25/21 19:57	1014
Ethyl Acetate	ND	ug/M3	0.72		1	08/25/21	08/25/21 19:57	1014
Ethylbenzene	ND	ug/M3	0.43		1	08/25/21	08/25/21 19:57	1014
4-Ethyltoluene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: D211 Classroom **Date/Time Sampled: 08/23/2021 18:40** **PSS Sample ID: 21082404-014**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
n-Heptane	ND	ug/M3	0.82		1	08/25/21	08/25/21 19:57	1014
Hexachlorobutadiene	ND	ug/M3	2.1		1	08/25/21	08/25/21 19:57	1014
n-Hexane	ND	ug/M3	14		1	08/25/21	08/25/21 19:57	1014
2-Hexanone (MBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 19:57	1014
Isopropylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014
Methylene Chloride	ND	ug/M3	14		1	08/25/21	08/25/21 19:57	1014
4-Methyl-2-Pentanone (MIBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 19:57	1014
Methyl-t-Butyl Ether	ND	ug/M3	0.36		1	08/25/21	08/25/21 19:57	1014
Naphthalene	ND	ug/M3	0.52		1	08/25/21	08/25/21 19:57	1014
Propylene	ND	ug/M3	1.7		1	08/25/21	08/25/21 19:57	1014
n-Propylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014
Styrene	ND	ug/M3	4.3		1	08/25/21	08/25/21 19:57	1014
1,1,2,2-Tetrachloroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:57	1014
Tetrachloroethene	ND	ug/M3	1.4		1	08/25/21	08/25/21 19:57	1014
Tetrahydrofuran	ND	ug/M3	0.59		1	08/25/21	08/25/21 19:57	1014
Toluene	**0.57**	ug/M3	0.38		1	08/25/21	08/25/21 19:57	1014
1,2,4-Trichlorobenzene	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:57	1014
1,1,1-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:57	1014
1,1,2-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:57	1014
Trichloroethene	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:57	1014
Trichlorofluoromethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 19:57	1014
1,1,2-Trichlorotrifluoroethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 19:57	1014
1,2,4-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014
1,3,5-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 19:57	1014
2,2,4-Trimethylpentane	ND	ug/M3	0.93		1	08/25/21	08/25/21 19:57	1014
Vinyl acetate	ND	ug/M3	1.8		1	08/25/21	08/25/21 19:57	1014
Bromoethene	ND	ug/M3	0.87		1	08/25/21	08/25/21 19:57	1014
Vinyl chloride	ND	ug/M3	0.51		1	08/25/21	08/25/21 19:57	1014
m&p-Xylene	ND	ug/M3	0.87		1	08/25/21	08/25/21 19:57	1014
o-Xylene	ND	ug/M3	0.43		1	08/25/21	08/25/21 19:57	1014

Surrogate(s)	*Recovery*		*Limits*				
4-Bromofluorobenzene	*99*	*%*	*87-120*		*1*	*08/25/21*	*08/25/21 19:57*	*1014*

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: Outside Courtyard **Date/Time Sampled: 08/23/2021 18:15** **PSS Sample ID: 21082404-015**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	**13**	ug/M3	9.5		1	08/25/21	08/25/21 20:51	1014
Benzene	ND	ug/M3	0.32		1	08/25/21	08/25/21 20:51	1014
Benzyl Chloride	ND	ug/M3	1.0		1	08/25/21	08/25/21 20:51	1014
Bromodichloromethane	ND	ug/M3	1.3		1	08/25/21	08/25/21 20:51	1014
Bromoform	ND	ug/M3	2.1		1	08/25/21	08/25/21 20:51	1014
Bromomethane	ND	ug/M3	0.78		1	08/25/21	08/25/21 20:51	1014
1,3-Butadiene	ND	ug/M3	0.44		1	08/25/21	08/25/21 20:51	1014
2-Butanone (MEK)	ND	ug/M3	1.5		1	08/25/21	08/25/21 20:51	1014
Carbon Disulfide	ND	ug/M3	12		1	08/25/21	08/25/21 20:51	1014
Carbon Tetrachloride	ND	ug/M3	1.3		1	08/25/21	08/25/21 20:51	1014
Chlorobenzene	ND	ug/M3	0.92		1	08/25/21	08/25/21 20:51	1014
Chloroethane	ND	ug/M3	0.53		1	08/25/21	08/25/21 20:51	1014
Chloroform	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014
Chloromethane	**0.89**	ug/M3	0.41		1	08/25/21	08/25/21 20:51	1014
Allyl Chloride (3-Chloropropene)	ND	ug/M3	0.63		1	08/25/21	08/25/21 20:51	1014
Cyclohexane	ND	ug/M3	0.69		1	08/25/21	08/25/21 20:51	1014
Dibromochloromethane	ND	ug/M3	1.7		1	08/25/21	08/25/21 20:51	1014
1,2-Dibromoethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 20:51	1014
1,2-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 20:51	1014
1,3-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 20:51	1014
1,4-Dichlorobenzene	ND	ug/M3	1.2		1	08/25/21	08/25/21 20:51	1014
Dichlorodifluoromethane	**1.3**	ug/M3	0.99		1	08/25/21	08/25/21 20:51	1014
1,1-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 20:51	1014
1,2-Dichloroethane	ND	ug/M3	0.81		1	08/25/21	08/25/21 20:51	1014
1,1-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 20:51	1014
cis-1,2-Dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 20:51	1014
trans-1,2-dichloroethene	ND	ug/M3	0.79		1	08/25/21	08/25/21 20:51	1014
1,2-Dichloropropane	ND	ug/M3	1.8		1	08/25/21	08/25/21 20:51	1014
cis-1,3-Dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 20:51	1014
trans-1,3-dichloropropene	ND	ug/M3	0.91		1	08/25/21	08/25/21 20:51	1014
1,2-Dichlorotetrafluoroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 20:51	1014
1,4-Dioxane (P-Dioxane)	ND	ug/M3	3.6		1	08/25/21	08/25/21 20:51	1014
Ethyl Acetate	ND	ug/M3	0.72		1	08/25/21	08/25/21 20:51	1014
Ethylbenzene	ND	ug/M3	0.43		1	08/25/21	08/25/21 20:51	1014
4-Ethyltoluene	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Sample ID: Outside Courtyard **Date/Time Sampled: 08/23/2021 18:15** **PSS Sample ID: 21082404-015**
Matrix: AIR **Date/Time Received: 08/24/2021 11:30**

VOCs in Air by GC/MS Analytical Method: EPA TO-15 Preparation Method: TO-15P

Qualifier(s): See Batch 187060 on Case Narrative.

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
n-Heptane	ND	ug/M3	0.82		1	08/25/21	08/25/21 20:51	1014
Hexachlorobutadiene	ND	ug/M3	2.1		1	08/25/21	08/25/21 20:51	1014
n-Hexane	ND	ug/M3	14		1	08/25/21	08/25/21 20:51	1014
2-Hexanone (MBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 20:51	1014
Isopropylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014
Methylene Chloride	ND	ug/M3	14		1	08/25/21	08/25/21 20:51	1014
4-Methyl-2-Pentanone (MIBK)	ND	ug/M3	2.0		1	08/25/21	08/25/21 20:51	1014
Methyl-t-Butyl Ether	ND	ug/M3	0.36		1	08/25/21	08/25/21 20:51	1014
Naphthalene	ND	ug/M3	0.52		1	08/25/21	08/25/21 20:51	1014
Propylene	ND	ug/M3	1.7		1	08/25/21	08/25/21 20:51	1014
n-Propylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014
Styrene	ND	ug/M3	4.3		1	08/25/21	08/25/21 20:51	1014
1,1,2,2-Tetrachloroethane	ND	ug/M3	1.4		1	08/25/21	08/25/21 20:51	1014
Tetrachloroethene	ND	ug/M3	1.4		1	08/25/21	08/25/21 20:51	1014
Tetrahydrofuran	ND	ug/M3	0.59		1	08/25/21	08/25/21 20:51	1014
Toluene	**0.49**	ug/M3	0.38		1	08/25/21	08/25/21 20:51	1014
1,2,4-Trichlorobenzene	ND	ug/M3	1.5		1	08/25/21	08/25/21 20:51	1014
1,1,1-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 20:51	1014
1,1,2-Trichloroethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 20:51	1014
Trichloroethene	ND	ug/M3	1.1		1	08/25/21	08/25/21 20:51	1014
Trichlorofluoromethane	ND	ug/M3	1.1		1	08/25/21	08/25/21 20:51	1014
1,1,2-Trichlorotrifluoroethane	ND	ug/M3	1.5		1	08/25/21	08/25/21 20:51	1014
1,2,4-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014
1,3,5-Trimethylbenzene	ND	ug/M3	0.98		1	08/25/21	08/25/21 20:51	1014
2,2,4-Trimethylpentane	ND	ug/M3	0.93		1	08/25/21	08/25/21 20:51	1014
Vinyl acetate	ND	ug/M3	1.8		1	08/25/21	08/25/21 20:51	1014
Bromoethene	ND	ug/M3	0.87		1	08/25/21	08/25/21 20:51	1014
Vinyl chloride	ND	ug/M3	0.51		1	08/25/21	08/25/21 20:51	1014
m&p-Xylene	ND	ug/M3	0.87		1	08/25/21	08/25/21 20:51	1014
o-Xylene	ND	ug/M3	0.43		1	08/25/21	08/25/21 20:51	1014

Surrogate(s)	*Recovery*		*Limits*				
4-Bromofluorobenzene	*98*	*%*	*87-120*		*1*	*08/25/21*	*08/25/21 20:51*	*1014*

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

01 September 2021

Amber Confer
Phase Separation Science, Inc.
6630 Baltimore National Pike, Route 40 West
Baltimore, MD 21228
RE: ACPS

Enclosed are the results of analyses for samples received by the laboratory on 08/25/21 11:10.

Maryland Spectral Services, Inc. is a TNI 2009 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2009 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2009 Standard accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Rabecka Koons
Quality Assurance Officer

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CAFETERIA 2	21082404-001	1082526-01	Vapor	08/23/21 17:06	08/25/21 11:10
CAFETERIA 1	21082404-002	1082526-02	Vapor	08/23/21 17:10	08/25/21 11:10
MAIN GYMNASIUM	21082404-003	1082526-03	Vapor	08/23/21 17:18	08/25/21 11:10
C109 HALLWAY	21082404-004	1082526-04	Vapor	08/23/21 17:26	08/25/21 11:10
C127 CLASSROOM	21082404-005	1082526-05	Vapor	08/23/21 18:04	08/25/21 11:10
AUDITORIUM	21082404-006	1082526-06	Vapor	08/23/21 18:08	08/25/21 11:10
ADMIN OFFICE	21082404-007	1082526-07	Vapor	08/23/21 17:37	08/25/21 11:10
E109 CLASSROOM	21082404-010	1082526-08	Vapor	08/23/21 17:32	08/25/21 11:10
B205 CLASSROOM	21082404-011	1082526-09	Vapor	08/23/21 18:20	08/25/21 11:10
E210 CLASSROOM	21082404-012	1082526-10	Vapor	08/23/21 18:27	08/25/21 11:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

CAFETERIA 2
21082404-001
1082526-01 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**44.4**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 17:08	WB
Benzene	**0.38**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 17:08	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 17:08	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:08	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 17:08	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 17:08	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 17:08	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 17:08	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:08	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 17:08	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 17:08	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 17:08	WB
Chloromethane	**1.14**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 17:08	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 17:08	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 17:08	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:08	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 17:08	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:08	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:08	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:08	WB
Dichlorodifluoromethane	**2.03**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 17:08	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 17:08	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 17:08	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:08	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:08	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:08	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 17:08	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 17:08	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 17:08	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 17:08	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 17:08	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:08	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:08	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 17:08	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

CAFETERIA 2
21082404-001
1082526-01 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 17:08	WB
n-Heptane	**0.25**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 17:08	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 17:08	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 17:08	WB
2-Hexanone	**0.16**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 17:08	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 17:08	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 17:08	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 17:08	WB
Methyl ethyl ketone (2-Butanone)	**1.59**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 17:08	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 17:08	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 17:08	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 17:08	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 17:08	WB
Styrene	ND		ug/m³	0.85	0.15	1	08/25/21	08/25/21 17:08	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 17:08	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 17:08	WB
Tetrahydrofuran	ND		ug/m³	0.59	0.15	1	08/25/21	08/25/21 17:08	WB
Toluene	**1.02**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 17:08	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 17:08	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:08	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:08	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:08	WB
Trichlorofluoromethane (Freon 11)	**1.18**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:08	WB
1,2,4-Trimethylbenzene	**0.25**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:08	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:08	WB
2,2,4-Trimethylpentane	**0.33**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 17:08	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 17:08	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:08	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 17:08	WB
o-Xylene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:08	WB
m- & p-Xylenes	ND		ug/m³	1.70	0.43	1	08/25/21	08/25/21 17:08	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*105 %*			*08/25/21*	*08/25/21 17:08*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

CAFETERIA 1
21082404-002
1082526-02 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**50.5**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 17:48	WB
Benzene	**0.48**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 17:48	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 17:48	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:48	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 17:48	WB
Bromomethane	**0.31**	J	ug/m³	0.78	0.20	1	08/25/21	08/25/21 17:48	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 17:48	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 17:48	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:48	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 17:48	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 17:48	WB
Chloroform	**0.39**	J	ug/m³	0.97	0.24	1	08/25/21	08/25/21 17:48	WB
Chloromethane	**6.05**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 17:48	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 17:48	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 17:48	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 17:48	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 17:48	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:48	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:48	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 17:48	WB
Dichlorodifluoromethane	**2.08**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 17:48	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 17:48	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 17:48	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:48	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:48	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 17:48	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 17:48	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 17:48	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 17:48	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 17:48	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 17:48	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:48	WB
4-Ethyltoluene	**0.25**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:48	WB
Freon 113	**0.46**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 17:48	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

CAFETERIA 1
21082404-002
1082526-02 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 17:48	WB
n-Heptane	**0.49**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 17:48	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 17:48	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 17:48	WB
2-Hexanone	**0.41**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 17:48	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 17:48	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 17:48	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 17:48	WB
Methyl ethyl ketone (2-Butanone)	**2.42**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 17:48	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 17:48	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 17:48	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 17:48	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 17:48	WB
Styrene	ND		ug/m³	0.85	0.15	1	08/25/21	08/25/21 17:48	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 17:48	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 17:48	WB
Tetrahydrofuran	**0.44**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 17:48	WB
Toluene	**1.02**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 17:48	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 17:48	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:48	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:48	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:48	WB
Trichlorofluoromethane (Freon 11)	**1.24**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 17:48	WB
1,2,4-Trimethylbenzene	**0.34**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:48	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 17:48	WB
2,2,4-Trimethylpentane	**0.37**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 17:48	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 17:48	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:48	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 17:48	WB
o-Xylene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 17:48	WB
m- & p-Xylenes	**0.56**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 17:48	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*103 %*		*08/25/21*		*08/25/21 17:48*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

MAIN GYMNASIUM
21082404-003
1082526-03 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**12.6**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 18:23	WB
Benzene	**0.38**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 18:23	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 18:23	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:23	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 18:23	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 18:23	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 18:23	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 18:23	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:23	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 18:23	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 18:23	WB
Chloroform	**0.39**	J	ug/m³	0.97	0.24	1	08/25/21	08/25/21 18:23	WB
Chloromethane	**1.07**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 18:23	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 18:23	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 18:23	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:23	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 18:23	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:23	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:23	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:23	WB
Dichlorodifluoromethane	**2.18**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 18:23	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 18:23	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 18:23	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:23	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:23	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:23	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 18:23	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 18:23	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 18:23	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 18:23	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 18:23	WB
Ethylbenzene	**0.26**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:23	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:23	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 18:23	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

MAIN GYMNASIUM
21082404-003
1082526-03 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 18:23	WB
n-Heptane	**0.25**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 18:23	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 18:23	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 18:23	WB
2-Hexanone	ND		ug/m³	0.82	0.15	1	08/25/21	08/25/21 18:23	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 18:23	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 18:23	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 18:23	WB
Methyl ethyl ketone (2-Butanone)	**1.36**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 18:23	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 18:23	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 18:23	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 18:23	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 18:23	WB
Styrene	ND		ug/m³	0.85	0.15	1	08/25/21	08/25/21 18:23	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 18:23	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 18:23	WB
Tetrahydrofuran	ND		ug/m³	0.59	0.15	1	08/25/21	08/25/21 18:23	WB
Toluene	**0.75**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 18:23	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 18:23	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:23	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:23	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:23	WB
Trichlorofluoromethane (Freon 11)	**1.29**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:23	WB
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:23	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:23	WB
2,2,4-Trimethylpentane	**0.37**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 18:23	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 18:23	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:23	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 18:23	WB
o-Xylene	**0.30**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:23	WB
m- & p-Xylenes	**0.91**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 18:23	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*98 %*			*08/25/21*	*08/25/21 18:23*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

C109 HALLWAY
21082404-004
1082526-04 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**26.0**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 18:57	WB
Benzene	**0.48**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 18:57	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 18:57	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:57	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 18:57	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 18:57	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 18:57	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 18:57	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:57	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 18:57	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 18:57	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 18:57	WB
Chloromethane	**1.16**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 18:57	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 18:57	WB
Cyclohexane	**0.21**	J	ug/m³	0.69	0.17	1	08/25/21	08/25/21 18:57	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 18:57	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 18:57	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:57	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:57	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 18:57	WB
Dichlorodifluoromethane	**2.18**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 18:57	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 18:57	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 18:57	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:57	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:57	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 18:57	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 18:57	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 18:57	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 18:57	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 18:57	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 18:57	WB
Ethylbenzene	**0.87**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:57	WB
4-Ethyltoluene	**1.52**		ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:57	WB
Freon 113	**0.61**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 18:57	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

C109 HALLWAY
21082404-004
1082526-04 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 18:57	WB
n-Heptane	**0.49**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 18:57	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 18:57	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 18:57	WB
2-Hexanone	ND		ug/m³	0.82	0.15	1	08/25/21	08/25/21 18:57	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 18:57	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 18:57	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 18:57	WB
Methyl ethyl ketone (2-Butanone)	**1.89**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 18:57	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 18:57	WB
Naphthalene	**2.31**		ug/m³	1.10	0.70	1	08/25/21	08/25/21 18:57	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 18:57	WB
n-Propylbenzene	**0.44**	J	ug/m³	0.98	0.40	1	08/25/21	08/25/21 18:57	WB
Styrene	**0.26**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 18:57	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 18:57	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 18:57	WB
Tetrahydrofuran	ND		ug/m³	0.59	0.15	1	08/25/21	08/25/21 18:57	WB
Toluene	**2.34**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 18:57	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 18:57	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:57	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:57	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:57	WB
Trichlorofluoromethane (Freon 11)	**1.29**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 18:57	WB
1,2,4-Trimethylbenzene	**1.62**		ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:57	WB
1,3,5-Trimethylbenzene	**0.34**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 18:57	WB
2,2,4-Trimethylpentane	ND		ug/m³	0.93	0.23	1	08/25/21	08/25/21 18:57	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 18:57	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:57	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 18:57	WB
o-Xylene	**1.22**		ug/m³	0.87	0.22	1	08/25/21	08/25/21 18:57	WB
m- & p-Xylenes	**2.56**		ug/m³	1.70	0.43	1	08/25/21	08/25/21 18:57	WB
Surrogate: 4-Bromofluorobenzene		*73-115*		*100 %*		*08/25/21*		*08/25/21 18:57*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

C127 CLASSROOM
21082404-005
1082526-05 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**24.9**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 19:31	WB
Benzene	**0.38**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 19:31	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 19:31	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 19:31	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 19:31	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 19:31	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 19:31	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 19:31	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 19:31	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 19:31	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 19:31	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 19:31	WB
Chloromethane	**1.09**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 19:31	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 19:31	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 19:31	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 19:31	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 19:31	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 19:31	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 19:31	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 19:31	WB
Dichlorodifluoromethane	**2.18**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 19:31	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 19:31	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 19:31	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 19:31	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 19:31	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 19:31	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 19:31	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 19:31	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 19:31	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 19:31	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 19:31	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 19:31	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 19:31	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 19:31	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

C127 CLASSROOM
21082404-005
1082526-05 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 19:31	WB
n-Heptane	**0.29**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 19:31	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 19:31	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 19:31	WB
2-Hexanone	ND		ug/m³	0.82	0.15	1	08/25/21	08/25/21 19:31	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 19:31	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 19:31	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 19:31	WB
Methyl ethyl ketone (2-Butanone)	**1.83**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 19:31	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 19:31	WB
Naphthalene	**4.04**		ug/m³	1.10	0.70	1	08/25/21	08/25/21 19:31	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 19:31	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 19:31	WB
Styrene	**0.21**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 19:31	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 19:31	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 19:31	WB
Tetrahydrofuran	**0.21**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 19:31	WB
Toluene	**0.90**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 19:31	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 19:31	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 19:31	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 19:31	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 19:31	WB
Trichlorofluoromethane (Freon 11)	**1.29**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 19:31	WB
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 19:31	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 19:31	WB
2,2,4-Trimethylpentane	**0.37**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 19:31	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 19:31	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 19:31	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 19:31	WB
o-Xylene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 19:31	WB
m- & p-Xylenes	**0.56**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 19:31	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*99 %*		*08/25/21*		*08/25/21 19:31*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

AUDITORIUM
21082404-006
1082526-06 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**21.0**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 20:06	WB
Benzene	**0.35**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 20:06	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 20:06	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:06	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 20:06	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 20:06	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 20:06	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 20:06	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:06	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 20:06	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 20:06	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 20:06	WB
Chloromethane	**1.07**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 20:06	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 20:06	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 20:06	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:06	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 20:06	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:06	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:06	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:06	WB
Dichlorodifluoromethane	**2.08**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 20:06	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 20:06	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 20:06	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:06	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:06	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:06	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 20:06	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 20:06	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 20:06	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 20:06	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 20:06	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:06	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:06	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 20:06	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

AUDITORIUM
21082404-006
1082526-06 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 20:06	WB
n-Heptane	ND		ug/m³	0.82	0.21	1	08/25/21	08/25/21 20:06	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 20:06	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 20:06	WB
2-Hexanone	**0.37**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 20:06	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 20:06	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 20:06	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 20:06	WB
Methyl ethyl ketone (2-Butanone)	**1.83**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 20:06	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 20:06	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 20:06	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 20:06	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 20:06	WB
Styrene	ND		ug/m³	0.85	0.15	1	08/25/21	08/25/21 20:06	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 20:06	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 20:06	WB
Tetrahydrofuran	**0.38**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 20:06	WB
Toluene	**0.83**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 20:06	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 20:06	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:06	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:06	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:06	WB
Trichlorofluoromethane (Freon 11)	**1.12**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:06	WB
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:06	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:06	WB
2,2,4-Trimethylpentane	**0.37**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 20:06	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 20:06	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:06	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 20:06	WB
o-Xylene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:06	WB
m- & p-Xylenes	**0.43**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 20:06	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*99 %*			*08/25/21*	*08/25/21 20:06*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

ADMIN OFFICE
21082404-007
1082526-07 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**31.4**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 20:44	WB
Benzene	**0.38**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 20:44	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 20:44	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:44	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 20:44	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 20:44	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 20:44	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 20:44	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:44	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 20:44	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 20:44	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 20:44	WB
Chloromethane	**1.07**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 20:44	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 20:44	WB
Cyclohexane	**0.21**	J	ug/m³	0.69	0.17	1	08/25/21	08/25/21 20:44	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 20:44	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 20:44	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:44	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:44	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 20:44	WB
Dichlorodifluoromethane	**2.13**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 20:44	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 20:44	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 20:44	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:44	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:44	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 20:44	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 20:44	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 20:44	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 20:44	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 20:44	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 20:44	WB
Ethylbenzene	**0.43**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:44	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:44	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 20:44	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

ADMIN OFFICE
21082404-007
1082526-07 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 20:44	WB
n-Heptane	**0.37**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 20:44	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 20:44	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 20:44	WB
2-Hexanone	**0.45**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 20:44	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 20:44	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 20:44	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 20:44	WB
Methyl ethyl ketone (2-Butanone)	**2.42**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 20:44	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 20:44	WB
Naphthalene	**0.89**	J	ug/m³	1.10	0.70	1	08/25/21	08/25/21 20:44	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 20:44	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 20:44	WB
Styrene	**0.64**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 20:44	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 20:44	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 20:44	WB
Tetrahydrofuran	**0.44**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 20:44	WB
Toluene	**1.88**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 20:44	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 20:44	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:44	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:44	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:44	WB
Trichlorofluoromethane (Freon 11)	**1.24**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 20:44	WB
1,2,4-Trimethylbenzene	**0.25**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:44	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 20:44	WB
2,2,4-Trimethylpentane	ND		ug/m³	0.93	0.23	1	08/25/21	08/25/21 20:44	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 20:44	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:44	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 20:44	WB
o-Xylene	**0.30**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 20:44	WB
m- & p-Xylenes	**0.87**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 20:44	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*100 %*		*08/25/21*		*08/25/21 20:44*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

E109 CLASSROOM
21082404-010
1082526-08 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**19.2**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 21:18	WB
Benzene	**0.35**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 21:18	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 21:18	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:18	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 21:18	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 21:18	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 21:18	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 21:18	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:18	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 21:18	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 21:18	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 21:18	WB
Chloromethane	**1.14**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 21:18	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 21:18	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 21:18	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:18	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 21:18	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:18	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:18	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:18	WB
Dichlorodifluoromethane	**2.13**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 21:18	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 21:18	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 21:18	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:18	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:18	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:18	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 21:18	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 21:18	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 21:18	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 21:18	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 21:18	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:18	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:18	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 21:18	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

E109 CLASSROOM
21082404-010
1082526-08 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 21:18	WB
n-Heptane	**0.41**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 21:18	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 21:18	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 21:18	WB
2-Hexanone	**0.29**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 21:18	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 21:18	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 21:18	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 21:18	WB
Methyl ethyl ketone (2-Butanone)	**1.80**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 21:18	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 21:18	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 21:18	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 21:18	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 21:18	WB
Styrene	**0.38**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 21:18	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 21:18	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 21:18	WB
Tetrahydrofuran	**0.44**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 21:18	WB
Toluene	**1.66**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 21:18	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 21:18	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:18	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:18	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:18	WB
Trichlorofluoromethane (Freon 11)	**1.18**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:18	WB
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:18	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:18	WB
2,2,4-Trimethylpentane	**0.37**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 21:18	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 21:18	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:18	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 21:18	WB
o-Xylene	**0.30**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:18	WB
m- & p-Xylenes	**0.74**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 21:18	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*99 %*		*08/25/21*		*08/25/21 21:18*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

B205 CLASSROOM
21082404-011
1082526-09 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**25.8**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 21:53	WB
Benzene	**0.35**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 21:53	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 21:53	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:53	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 21:53	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 21:53	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 21:53	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 21:53	WB
Carbon tetrachloride	**0.38**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:53	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 21:53	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 21:53	WB
Chloroform	**3.42**		ug/m³	0.97	0.24	1	08/25/21	08/25/21 21:53	WB
Chloromethane	**0.99**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 21:53	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 21:53	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 21:53	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 21:53	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 21:53	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:53	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:53	WB
1,4-Dichlorobenzene	**0.48**	J	ug/m³	1.20	0.30	1	08/25/21	08/25/21 21:53	WB
Dichlorodifluoromethane	**1.98**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 21:53	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 21:53	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 21:53	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:53	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:53	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 21:53	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 21:53	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 21:53	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 21:53	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 21:53	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 21:53	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:53	WB
4-Ethyltoluene	**0.29**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:53	WB
Freon 113	**0.54**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 21:53	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

B205 CLASSROOM
21082404-011
1082526-09 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 21:53	WB
n-Heptane	**0.37**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 21:53	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 21:53	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 21:53	WB
2-Hexanone	**0.29**	J	ug/m³	0.82	0.15	1	08/25/21	08/25/21 21:53	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 21:53	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 21:53	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 21:53	WB
Methyl ethyl ketone (2-Butanone)	**1.83**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 21:53	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 21:53	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 21:53	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 21:53	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 21:53	WB
Styrene	**0.38**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 21:53	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 21:53	WB
Tetrachloroethene	**0.75**	J	ug/m³	1.40	0.70	1	08/25/21	08/25/21 21:53	WB
Tetrahydrofuran	**0.18**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 21:53	WB
Toluene	**1.21**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 21:53	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 21:53	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:53	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:53	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:53	WB
Trichlorofluoromethane (Freon 11)	**1.24**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 21:53	WB
1,2,4-Trimethylbenzene	**0.34**	J	ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:53	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 21:53	WB
2,2,4-Trimethylpentane	ND		ug/m³	0.93	0.23	1	08/25/21	08/25/21 21:53	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 21:53	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:53	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 21:53	WB
o-Xylene	**0.30**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 21:53	WB
m- & p-Xylenes	**0.69**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 21:53	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*98 %*		*08/25/21*		*08/25/21 21:53*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

E210 CLASSROOM
21082404-012
1082526-10 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	**17.9**		ug/m³	2.40	2.40	1	08/25/21	08/25/21 22:27	WB
Benzene	**0.32**	J	ug/m³	0.64	0.16	1	08/25/21	08/25/21 22:27	WB
Benzyl chloride	ND		ug/m³	1.00	0.25	1	08/25/21	08/25/21 22:27	WB
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 22:27	WB
Bromoform	ND		ug/m³	2.10	0.53	1	08/25/21	08/25/21 22:27	WB
Bromomethane	ND		ug/m³	0.78	0.20	1	08/25/21	08/25/21 22:27	WB
1,3-Butadiene	ND		ug/m³	0.44	0.44	1	08/25/21	08/25/21 22:27	WB
Carbon disulfide	ND		ug/m³	1.56	1.56	1	08/25/21	08/25/21 22:27	WB
Carbon tetrachloride	**0.44**	J	ug/m³	1.30	0.33	1	08/25/21	08/25/21 22:27	WB
Chlorobenzene	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 22:27	WB
Chloroethane	ND		ug/m³	0.53	0.27	1	08/25/21	08/25/21 22:27	WB
Chloroform	ND		ug/m³	0.97	0.24	1	08/25/21	08/25/21 22:27	WB
Chloromethane	**1.01**		ug/m³	0.41	0.10	1	08/25/21	08/25/21 22:27	WB
3-Chloropropene	ND		ug/m³	0.63	0.16	1	08/25/21	08/25/21 22:27	WB
Cyclohexane	ND		ug/m³	0.69	0.17	1	08/25/21	08/25/21 22:27	WB
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	08/25/21	08/25/21 22:27	WB
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 22:27	WB
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 22:27	WB
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 22:27	WB
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	08/25/21	08/25/21 22:27	WB
Dichlorodifluoromethane	**2.03**		ug/m³	0.99	0.99	1	08/25/21	08/25/21 22:27	WB
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 22:27	WB
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	08/25/21	08/25/21 22:27	WB
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 22:27	WB
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 22:27	WB
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	08/25/21	08/25/21 22:27	WB
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	08/25/21	08/25/21 22:27	WB
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 22:27	WB
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	08/25/21	08/25/21 22:27	WB
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	08/25/21	08/25/21 22:27	WB
Ethyl acetate	ND		ug/m³	3.60	3.60	1	08/25/21	08/25/21 22:27	WB
Ethylbenzene	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 22:27	WB
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 22:27	WB
Freon 113	**0.46**	J	ug/m³	1.50	0.38	1	08/25/21	08/25/21 22:27	WB

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

E210 CLASSROOM
21082404-012
1082526-10 (Vapor)
Sample Date: 08/23/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	08/25/21	08/25/21 22:27	WB
n-Heptane	**0.41**	J	ug/m³	0.82	0.21	1	08/25/21	08/25/21 22:27	WB
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	08/25/21	08/25/21 22:27	WB
Hexane	ND		ug/m³	14.0	14.0	1	08/25/21	08/25/21 22:27	WB
2-Hexanone	ND		ug/m³	0.82	0.15	1	08/25/21	08/25/21 22:27	WB
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	08/25/21	08/25/21 22:27	WB
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	08/25/21	08/25/21 22:27	WB
Methylene chloride	ND		ug/m³	18.0	18.0	1	08/25/21	08/25/21 22:27	WB
Methyl ethyl ketone (2-Butanone)	**1.62**		ug/m³	0.59	0.34	1	08/25/21	08/25/21 22:27	WB
Methyl isobutyl ketone	ND		ug/m³	0.82	0.82	1	08/25/21	08/25/21 22:27	WB
Naphthalene	ND		ug/m³	1.10	0.70	1	08/25/21	08/25/21 22:27	WB
Propene	ND		ug/m³	0.34	0.34	1	08/25/21	08/25/21 22:27	WB
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	08/25/21	08/25/21 22:27	WB
Styrene	**0.26**	J	ug/m³	0.85	0.15	1	08/25/21	08/25/21 22:27	WB
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	08/25/21	08/25/21 22:27	WB
Tetrachloroethene	ND		ug/m³	1.40	0.70	1	08/25/21	08/25/21 22:27	WB
Tetrahydrofuran	**0.59**	J	ug/m³	0.59	0.15	1	08/25/21	08/25/21 22:27	WB
Toluene	**1.32**		ug/m³	0.75	0.35	1	08/25/21	08/25/21 22:27	WB
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	08/25/21	08/25/21 22:27	WB
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 22:27	WB
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 22:27	WB
Trichloroethene	ND		ug/m³	1.10	0.28	1	08/25/21	08/25/21 22:27	WB
Trichlorofluoromethane (Freon 11)	**1.24**		ug/m³	1.10	0.28	1	08/25/21	08/25/21 22:27	WB
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 22:27	WB
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	08/25/21	08/25/21 22:27	WB
2,2,4-Trimethylpentane	**0.33**	J	ug/m³	0.93	0.23	1	08/25/21	08/25/21 22:27	WB
Vinyl acetate	ND		ug/m³	0.70	0.70	1	08/25/21	08/25/21 22:27	WB
Vinyl bromide	ND		ug/m³	0.87	0.22	1	08/25/21	08/25/21 22:27	WB
Vinyl chloride	ND		ug/m³	0.51	0.13	1	08/25/21	08/25/21 22:27	WB
o-Xylene	**0.26**	J	ug/m³	0.87	0.22	1	08/25/21	08/25/21 22:27	WB
m- & p-Xylenes	**0.61**	J	ug/m³	1.70	0.43	1	08/25/21	08/25/21 22:27	WB
Surrogate: 4-Bromofluorobenzene			*73-115*	*98 %*		*08/25/21*		*08/25/21 22:27*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: ACPS

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/01/21 17:13

Notes and Definitions

J	Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accreditation

Rabecka Koons, Quality Assurance Officer

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

W.O. No. : **21082404**
Project Location : 4646 Seminary Rd. Alexandria, VA
Project Number : 2471.0002
Report To LOD : No

Samples Transferred To:
Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
Phone : 410-247-7600

For Questions or issues please contact: Amber Confer

Report Due On :09/01/21 05:00

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21082404-001	Cafeteria 2	08/23/21	17:06	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-002	Cafeteria 1	08/23/21	17:10	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-003	Main Gymnasium	08/23/21	17:18	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-004	C109 Hallway	08/23/21	17:26	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-005	C127 Classroom	08/23/21	18:04	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-006	Auditorium	08/23/21	18:08	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-007	Admin Office	08/23/21	17:37	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-010	E109 Classroom	08/23/21	17:32	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-011	B205 Classroom	08/23/21	18:20	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21082404-012	E210 Classroom	08/23/21	18:27	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON

10825 26

-001 -002 -003 -004 -005 -006 -007 -010 -011 -012

Data Deliverables Required: COA

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send InvoiceAttn : invoicing@phaseonline.com

Airbill No.: _____ Carrier : TIE

Condition Upon Receipt : _____

Comments : _____

Samples Relinquished By : _____ Date : _____ Time: _____ Samples Received By : _____

Samples Relinquished By: _____ Date : _____ Time : _____ Samples Received By: Lori Foster

Samples Relinquished By: _____ Date: 8/25/21 Time: 11:10 Samples Received By: _____

Air Analysis by TO-15

Chain of Custody

Client Contact Information	Project Manager: Amber Confer	Carrier:	1 of 1 COCs
Company: Phase Separation	Phone:	Samplers Name(s)	Analysis/Matrix
	Site Contact:		
Project Name: ACPS	Analysis Turnaround Time		
Site:	Standard (Specify)		
PO #	Rush (Specify)		

Client Sample ID	Sample Date Start	Time Start (24 hr clock)	Sample Date Stop	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Incoming Canister Pressure ("Hg) (Lab)	Sample Regulator ID	Can ID	Can Size (L)	TO-15 FULL LIST	TO-15 ABREVIATED LIST	Indoor / Ambient Air	Soil Gas / Substab	Comments
21082404-001	8/23/21	0925	8/23/21	1706	29.75	6.5			9605	1.4L	X		X		1082526 - 01
21082404-002	↓	0932	↓	1710	30.0	8.2			00584	↓	↓		↓		- 02
21082404-003		0942		1718	30.0	2.0		04691	3662						- 03
21082404-004		0947		1726	30.0	1.2		04703	883						- 04
21082404-005		0956		1804	30.0	1.0		04724	9332						- 05
21082404-006		1002		1808	30.0	4.0			609						- 06
21082404-007		1014		1737	30.0	6.0			3678						- 07
21082404-010		1046		1732	29.25	1.0		04500	3056						- 08
21082404-011		1055		1820	30.0	1.2		04502	607						- 09
21082404-012	↓	1100	↓	1827	30.0	2.2		3604	612	↓	↓		↓		- 10

Special Instructions/QC Requirements & Comments:

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time: 8/25/21 11:10
Samples Relinquished by:	Date/Time:	Received by: Lori Foster	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Project Name: ACPS - Francis Hammond MS

PSS Project No.: 21082404

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

Incoming pressures not taken at PSS for samples 001-007 and 010-012; samples subbed out. Incoming pressures will be taken at subcontracted lab.

21082404: Analyses associated with analyst code 4010 were performed by
Maryland Spectral Services, Inc., 1500 Caton Center Drive, Suite G, Baltimore, MD 21227 - VA 460156

Analytical:

VOCs in Air by GC/MS

Batch: 187060

Method exceedance: Laboratory control sample/laboratory control sample duplicate (LCS/LCSD)exceedances identified; see QC summary.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

EPA TO-15: 1,2-Dichlorotetrafluoroethane, Chloroethane, Dibromochloromethane

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Lab Chronology

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Method	Client Sample ID	Analysis Type	PSS Sample ID	Mtx	Prep Batch	Analytical Batch	Prepared	Analyzed
EPA TO-15	D108 Classroom	Initial	21082404-008	A	87437	187060	08/25/2021 07:29	08/25/2021 17:15
	159 Hallway	Initial	21082404-009	A	87437	187060	08/25/2021 07:29	08/25/2021 18:09
	Media Center	Initial	21082404-013	A	87437	187060	08/25/2021 07:29	08/25/2021 19:03
	D211 Classroom	Initial	21082404-014	A	87437	187060	08/25/2021 07:29	08/25/2021 19:57
	Outside Courtyard	Initial	21082404-015	A	87437	187060	08/25/2021 07:29	08/25/2021 20:51
	87437-1-BKS	BKS	87437-1-BKS	A	87437	187060	08/25/2021 07:29	08/25/2021 09:10
	87437-1-BLK	BLK	87437-1-BLK	A	87437	187060	08/25/2021 07:29	08/25/2021 11:50
	87437-1-BSD	BSD	87437-1-BSD	A	87437	187060	08/25/2021 07:29	08/25/2021 10:02

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

QC Summary

Project Name ACPS - Francis Hammond MS
PSS Project No.: 21082404

Analytical Method: EPA TO-15 Prep Method: TO-15P
Seq Number: 187060 Matrix: Air Date Prep: 08/25/21
MB Sample Id: 87437-1-BLK LCS Sample Id: 87437-1-BKS LCSD Sample Id: 87437-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Flag
Acetone	<9.498	11.87	<9.498	0	<9.498	0	69-118	NC	25	ug/M3	L
Benzene	<0.3193	15.97	14.40	90	14.40	90	79-107	0	25	ug/M3	
Benzyl Chloride	<1.035	25.87	31.21	121	31.31	121	78-143	0	25	ug/M3	
Bromodichloromethane	<1.340	33.49	29.47	88	29.47	88	81-111	0	25	ug/M3	
Bromoform	<2.067	51.67	54.77	106	55.60	108	78-133	2	25	ug/M3	
Bromomethane	<0.7764	19.41	16.61	86	18.17	94	76-116	9	25	ug/M3	
1,3-Butadiene	<0.4423	11.06	8.956	81	9.818	89	70-116	9	25	ug/M3	
2-Butanone (MEK)	<1.474	14.74	12.97	88	12.88	87	74-114	1	25	ug/M3	
Carbon Disulfide	<12.45	15.56	13.07	84	13.63	88	79-117	5	25	ug/M3	
Carbon Tetrachloride	<1.258	31.45	28.37	90	28.24	90	81-110	0	25	ug/M3	
Chlorobenzene	<0.9204	23.01	22.36	97	22.96	100	84-119	3	25	ug/M3	
Chloroethane	<0.5276	13.19	10.87	82	11.87	90	72-118	9	25	ug/M3	
Chloroform	<0.9761	24.40	21.72	89	21.67	89	82-108	0	25	ug/M3	
Chloromethane	<0.4128	10.32	7.658	74	8.670	84	64-121	13	25	ug/M3	
Allyl Chloride (3-Chloropropene)	<0.6258	15.64	13.52	86	14.24	91	77-113	6	25	ug/M3	
Cyclohexane	<0.6881	17.20	16.48	96	16.55	96	82-110	0	25	ug/M3	
Dibromochloromethane	<1.703	42.58	39.60	93	39.60	93	82-113	0	25	ug/M3	
1,2-Dibromoethane	<1.536	38.40	36.02	94	36.17	94	86-110	0	25	ug/M3	
1,2-Dichlorobenzene	<1.202	30.05	31.79	106	32.33	108	83-130	2	25	ug/M3	
1,3-Dichlorobenzene	<1.202	30.05	31.55	105	32.09	107	85-128	2	25	ug/M3	
1,4-Dichlorobenzene	<1.202	30.05	31.61	105	32.33	108	82-132	3	25	ug/M3	
Dichlorodifluoromethane	<0.9887	24.72	19.03	77	20.91	85	62-122	10	25	ug/M3	
1,1-Dichloroethane	<0.8092	20.23	17.44	86	17.80	88	79-110	2	25	ug/M3	
1,2-Dichloroethane	<0.8092	20.23	17.44	86	17.40	86	75-112	0	25	ug/M3	
1,1-Dichloroethene	<0.7926	19.82	16.76	85	17.68	89	80-110	5	25	ug/M3	
cis-1,2-Dichloroethene	<0.7926	19.82	18.23	92	18.39	93	84-109	1	25	ug/M3	
trans-1,2-dichloroethene	<0.7926	19.82	17.64	89	18.03	91	81-109	2	25	ug/M3	
1,2-Dichloropropane	<1.848	23.10	20.46	89	20.33	88	81-111	1	25	ug/M3	
cis-1,3-Dichloropropene	<0.9074	22.68	22.00	97	22.09	97	89-109	0	25	ug/M3	
trans-1,3-dichloropropene	<0.9074	22.68	22.00	97	21.91	97	89-114	0	25	ug/M3	
1,2-Dichlorotetrafluoroethane	<1.398	34.94	28.02	80	31.31	90	72-116	12	25	ug/M3	
1,4-Dioxane (P-Dioxane)	<3.602	18.01	18.08	100	17.98	100	70-120	0	25	ug/M3	
Ethyl Acetate	<0.7204	18.01	18.12	101	18.34	102	87-124	1	25	ug/M3	
Ethylbenzene	<0.4340	21.70	23.13	107	23.65	109	87-125	2	25	ug/M3	
4-Ethyltoluene	<0.9827	24.57	26.63	108	27.07	110	87-127	2	25	ug/M3	
n-Heptane	<0.8193	20.48	20.48	100	20.44	100	90-110	0	25	ug/M3	
Hexachlorobutadiene	<2.132	53.30	54.37	102	55.65	104	83-126	2	25	ug/M3	
n-Hexane	<14.09	17.61	17.19	98	17.33	98	84-114	0	25	ug/M3	
2-Hexanone (MBK)	<2.047	20.47	19.25	94	19.20	94	68-133	0	25	ug/M3	
Isopropylbenzene	<0.9827	24.57	24.91	101	25.40	103	88-117	2	25	ug/M3	
Methylene Chloride	<13.89	17.36	14.03	81	14.31	82	63-130	1	25	ug/M3	
4-Methyl-2-Pentanone (MIBK)	<2.047	20.47	19.08	93	19.00	93	78-115	0	25	ug/M3	
Methyl-t-Butyl Ether	<0.3604	18.02	17.51	97	17.88	99	86-109	2	25	ug/M3	
Naphthalene	<0.5240	26.20	36.94	141	37.67	144	65-129	2	25	ug/M3	H
Propylene	<1.720	8.602	6.279	73	7.191	84	58-129	14	25	ug/M3	
n-Propylbenzene	<0.9828	24.57	26.49	108	25.36	103	86-121	5	25	ug/M3	
Styrene	<4.258	21.29	24.23	114	24.61	116	86-137	2	25	ug/M3	
1,1,2,2-Tetrachloroethane	<1.373	34.31	33.35	97	34.04	99	88-119	2	25	ug/M3	
Tetrachloroethene	<1.356	33.90	32.55	96	32.82	97	86-107	1	25	ug/M3	
Tetrahydrofuran	<0.5895	14.74	13.91	94	13.85	94	80-117	0	25	ug/M3	
Toluene	<0.3767	18.83	18.72	99	18.87	100	91-106	1	25	ug/M3	

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

QC Summary

Project Name ACPS - Francis Hammond MS
PSS Project No.: 21082404

Analytical Method: EPA TO-15 Prep Method: TO-15P
Seq Number: 187060 Matrix: Air Date Prep: 08/25/21
MB Sample Id: 87437-1-BLK LCS Sample Id: 87437-1-BKS LCSD Sample Id: 87437-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Flag
1,2,4-Trichlorobenzene	<1.484	37.09	46.14	124	47.48	128	75-126	3	25	ug/M3	H
1,1,1-Trichloroethane	<1.091	27.27	24.55	90	24.55	90	81-109	0	25	ug/M3	
1,1,2-Trichloroethane	<1.091	27.27	24.82	91	24.76	91	83-111	0	25	ug/M3	
Trichloroethene	<1.074	26.86	24.93	93	24.87	93	88-106	0	25	ug/M3	
Trichlorofluoromethane	<1.123	28.08	22.58	80	24.26	86	78-109	7	25	ug/M3	
1,1,2-Trichlorotrifluoroethane	<1.532	38.31	32.64	85	34.40	90	84-107	6	25	ug/M3	
1,2,4-Trimethylbenzene	<0.9828	24.57	27.42	112	27.72	113	86-130	1	25	ug/M3	
1,3,5-Trimethylbenzene	<0.9828	24.57	25.95	106	26.49	108	87-122	2	25	ug/M3	
2,2,4-Trimethylpentane	<0.9339	23.35	21.43	92	21.43	92	78-107	0	25	ug/M3	
Vinyl acetate	<1.760	17.60	16.19	92	16.23	92	76-119	0	25	ug/M3	
Bromoethene	<0.8746	21.86	18.93	87	20.64	94	77-117	8	25	ug/M3	
Vinyl chloride	<0.5110	12.78	10.14	79	11.35	89	72-116	12	25	ug/M3	
m&p-Xylene	<0.8681	43.41	45.88	106	46.62	107	88-122	1	25	ug/M3	
o-Xylene	<0.4341	21.70	23.00	106	23.35	108	89-120	2	25	ug/M3	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units
4-Bromofluorobenzene	100		104		106		87-120	%

F = RPD exceeded the laboratory control limits
X = Recovery of MS, MSD or both outside of QC Criteria
H= Recovery of BS,BSD or both exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

QC Summary

Project Name ACPS - Francis Hammond MS
PSS Project No.: 21082404

Analytical Method: EPA TO-15
Seq Number: 187060 Matrix: Air
CCV Sample Id: CCV-01 Analyzed Date: 08/25/21 08:20

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Acetone	11.87	10.28	87	70-130	ug/M3	
Benzene	15.97	14.91	93	70-130	ug/M3	
Benzyl Chloride	25.87	27.97	108	70-130	ug/M3	
Bromodichloromethane	33.49	30.34	91	70-130	ug/M3	
Bromoform	51.67	52.90	102	70-130	ug/M3	
Bromomethane	19.41	18.28	94	70-130	ug/M3	
1,3-Butadiene	11.06	9.953	90	70-130	ug/M3	
2-Butanone (MEK)	14.74	13.56	92	70-130	ug/M3	
Carbon Disulfide	15.56	14.96	96	70-130	ug/M3	
Carbon Tetrachloride	31.45	28.75	91	70-130	ug/M3	
Chlorobenzene	23.01	23.06	100	70-130	ug/M3	
Chloroethane	13.19	12.25	93	70-130	ug/M3	
Chloroform	24.40	22.50	92	70-130	ug/M3	
Chloromethane	10.32	8.787	85	70-130	ug/M3	
Allyl Chloride (3-Chloropropene)	15.64	14.43	92	70-130	ug/M3	
Cyclohexane	17.20	17.03	99	70-130	ug/M3	
Dibromochloromethane	42.58	39.65	93	70-130	ug/M3	
1,2-Dibromoethane	38.40	36.92	96	70-130	ug/M3	
1,2-Dichlorobenzene	30.05	29.79	99	70-130	ug/M3	
1,3-Dichlorobenzene	30.05	30.17	100	70-130	ug/M3	
1,4-Dichlorobenzene	30.05	30.19	100	70-130	ug/M3	
Dichlorodifluoromethane	24.72	21.97	89	70-130	ug/M3	
1,1-Dichloroethane	20.23	18.60	92	70-130	ug/M3	
1,2-Dichloroethane	20.23	18.26	90	70-130	ug/M3	
1,1-Dichloroethene	19.82	18.44	93	70-130	ug/M3	
cis-1,2-Dichloroethene	19.82	19.07	96	70-130	ug/M3	
trans-1,2-dichloroethene	19.82	18.85	95	70-130	ug/M3	
1,2-Dichloropropane	23.10	21.20	92	70-130	ug/M3	
cis-1,3-Dichloropropene	22.68	22.58	100	70-130	ug/M3	
trans-1,3-dichloropropene	22.68	22.28	98	70-130	ug/M3	
1,2-Dichlorotetrafluoroethane	34.94	31.13	89	70-130	ug/M3	
1,4-Dioxane (P-Dioxane)	18.01	19.45	108	70-130	ug/M3	
Ethyl Acetate	18.01	18.98	105	70-130	ug/M3	
Ethylbenzene	21.70	23.74	109	70-130	ug/M3	
4-Ethyltoluene	24.57	26.65	108	70-130	ug/M3	
n-Heptane	20.48	21.14	103	70-130	ug/M3	
Hexachlorobutadiene	53.30	48.58	91	70-130	ug/M3	
n-Hexane	17.61	17.89	102	70-130	ug/M3	
2-Hexanone (MBK)	20.47	20.63	101	70-130	ug/M3	
Isopropylbenzene	24.57	25.29	103	70-130	ug/M3	
Methylene Chloride	17.36	15.28	88	70-130	ug/M3	
4-Methyl-2-Pentanone (MIBK)	20.47	20.01	98	70-130	ug/M3	
Methyl-t-Butyl Ether	18.02	18.51	103	70-130	ug/M3	
Naphthalene	26.20	28.45	109	70-130	ug/M3	
Propylene	8.602	7.222	84	70-130	ug/M3	
n-Propylbenzene	24.57	25.07	102	70-130	ug/M3	
Styrene	21.29	24.37	114	70-130	ug/M3	
1,1,2,2-Tetrachloroethane	34.31	33.17	97	70-130	ug/M3	
Tetrachloroethene	33.90	33.07	98	70-130	ug/M3	
Tetrahydrofuran	14.74	14.40	98	70-130	ug/M3	
Toluene	18.83	19.21	102	70-130	ug/M3	

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

QC Summary

Project Name ACPS - Francis Hammond MS
PSS Project No.: 21082404

Analytical Method: EPA TO-15
Seq Number: 187060 Matrix: Air
CCV Sample Id: CCV-01 Analyzed Date: 08/25/21 08:20

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
1,2,4-Trichlorobenzene	37.09	36.63	99	70-130	ug/M3	
1,1,1-Trichloroethane	27.27	25.56	94	70-130	ug/M3	
1,1,2-Trichloroethane	27.27	25.43	93	70-130	ug/M3	
Trichloroethene	26.86	25.84	96	70-130	ug/M3	
Trichlorofluoromethane	28.08	25.35	90	70-130	ug/M3	
1,1,2-Trichlorotrifluoroethane	38.31	35.67	93	70-130	ug/M3	
1,2,4-Trimethylbenzene	24.57	26.78	109	70-130	ug/M3	
1,3,5-Trimethylbenzene	24.57	25.82	105	70-130	ug/M3	
2,2,4-Trimethylpentane	23.35	22.40	96	70-130	ug/M3	
Vinyl acetate	17.60	16.10	91	70-130	ug/M3	
Bromoethene	21.86	21.04	96	70-130	ug/M3	
Vinyl chloride	12.78	11.26	88	70-130	ug/M3	

Surrogate	CCV Result	Limits	Units	Flag
4-Bromofluorobenzene	82	50-150	%	

Analytical Method: EPA TO-15

Seq Number: 185968 Matrix: Air

Parent Sample Id: ICV-01 ICV Sample Id: ICV-01 Analyzed Date: 07/15/21 13:32

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Acetone	11.87	10.66	90	70-130	ug/M3	
Benzene	15.97	15.51	97	70-130	ug/M3	
Benzyl Chloride	25.87	27.08	105	70-130	ug/M3	
Bromodichloromethane	33.49	32.04	96	70-130	ug/M3	
Bromoform	51.67	53.22	103	70-130	ug/M3	
Bromomethane	19.41	19.17	99	70-130	ug/M3	
1,3-Butadiene	11.06	10.68	97	70-130	ug/M3	
2-Butanone (MEK)	14.74	14.29	97	70-130	ug/M3	
Carbon Disulfide	15.56	15.20	98	70-130	ug/M3	
Carbon Tetrachloride	31.45	30.48	97	70-130	ug/M3	
Chlorobenzene	23.01	22.75	99	70-130	ug/M3	
Chloroethane	13.19	12.91	98	70-130	ug/M3	
Chloroform	24.40	23.55	97	70-130	ug/M3	
Chloromethane	10.32	9.584	93	70-130	ug/M3	
Allyl Chloride (3-Chloropropene)	15.64	15.43	99	70-130	ug/M3	
Cyclohexane	17.20	18.31	106	70-130	ug/M3	
Dibromochloromethane	42.58	41.98	99	70-130	ug/M3	
1,2-Dibromoethane	38.40	38.46	100	70-130	ug/M3	
1,2-Dichlorobenzene	30.05	29.90	100	70-130	ug/M3	
1,3-Dichlorobenzene	30.05	30.07	100	70-130	ug/M3	
1,4-Dichlorobenzene	30.05	30.27	101	70-130	ug/M3	
Dichlorodifluoromethane	24.72	23.21	94	70-130	ug/M3	
1,1-Dichloroethane	20.23	19.62	97	70-130	ug/M3	
1,2-Dichloroethane	20.23	19.32	96	70-130	ug/M3	
1,1-Dichloroethene	19.82	19.75	100	70-130	ug/M3	
cis-1,2-Dichloroethene	19.82	20.37	103	70-130	ug/M3	
trans-1,2-dichloroethene	19.82	19.79	100	70-130	ug/M3	
1,2-Dichloropropane	23.10	22.40	97	70-130	ug/M3	
cis-1,3-Dichloropropene	22.68	23.89	105	70-130	ug/M3	
trans-1,3-dichloropropene	22.68	23.53	104	70-130	ug/M3	
1,2-Dichlorotetrafluoroethane	34.94	33.51	96	70-130	ug/M3	
1,4-Dioxane (P-Dioxane)	18.01	19.14	106	70-130	ug/M3	
Ethyl Acetate	18.01	19.17	106	70-130	ug/M3	
Ethylbenzene	21.70	23.79	110	70-130	ug/M3	
4-Ethyltoluene	24.57	26.79	109	70-130	ug/M3	
n-Heptane	20.48	22.37	109	70-130	ug/M3	
Hexachlorobutadiene	53.30	47.13	88	70-130	ug/M3	
n-Hexane	17.61	18.94	108	70-130	ug/M3	
2-Hexanone (MBK)	20.47	21.03	103	70-130	ug/M3	
Isopropylbenzene	24.57	25.34	103	70-130	ug/M3	
Methylene Chloride	17.36	16.17	93	70-130	ug/M3	
4-Methyl-2-Pentanone (MIBK)	20.47	21.14	103	70-130	ug/M3	
Methyl-t-Butyl Ether	18.02	19.55	108	70-130	ug/M3	
Naphthalene	26.20	21.32	81	70-130	ug/M3	
Propylene	8.602	8.112	94	70-130	ug/M3	
n-Propylbenzene	24.57	26.87	109	70-130	ug/M3	
Styrene	21.29	24.28	114	70-130	ug/M3	
1,1,2,2-Tetrachloroethane	34.31	32.86	96	70-130	ug/M3	
Tetrachloroethene	33.90	34.26	101	70-130	ug/M3	
Tetrahydrofuran	14.74	15.47	105	70-130	ug/M3	
Toluene	18.83	20.13	107	70-130	ug/M3	

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

QC Summary

Project Name ACPS - Francis Hammond MS
PSS Project No.: 21082404

Analytical Method: EPA TO-15

Seq Number: 185968 Matrix: Air
Parent Sample Id: ICV-01 ICV Sample Id: ICV-01 Analyzed Date: 07/15/21 13:32

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
1,2,4-Trichlorobenzene	37.09	33.48	90	70-130	ug/M3	
1,1,1-Trichloroethane	27.27	26.75	98	70-130	ug/M3	
1,1,2-Trichloroethane	27.27	26.47	97	70-130	ug/M3	
Trichloroethene	26.86	26.83	100	70-130	ug/M3	
Trichlorofluoromethane	28.08	26.66	95	70-130	ug/M3	
1,1,2-Trichlorotrifluoroethane	38.31	37.18	97	70-130	ug/M3	
1,2,4-Trimethylbenzene	24.57	27.23	111	70-130	ug/M3	
1,3,5-Trimethylbenzene	24.57	26.05	106	70-130	ug/M3	
2,2,4-Trimethylpentane	23.35	23.79	102	70-130	ug/M3	
Vinyl acetate	17.60	18.06	103	70-130	ug/M3	
Bromoethene	21.86	21.66	99	70-130	ug/M3	
Vinyl chloride	12.78	12.23	96	70-130	ug/M3	
m&p-Xylene	43.41	46.74	108	70-130	ug/M3	
o-Xylene	21.70	23.49	108	70-130	ug/M3	

Surrogate	ICV Result	Limits	Units	Flag
4-Bromofluorobenzene	103	50-150	%	

X = Recovery outside of QC Criteria

PHASE SEPARATION SCIENCE

TO-15 CHAIN OF CUSTODY FORM

All Fields must be completed accurately. Shaded sections for lab use only.

www.phaseonline.com ~ info@phaseonline.com

6630 Baltimore National Pike ~ Suite 103-A ~ Baltimore, Maryland 21228 ~ (410) 747-8770 ~ (800) 932-9047

(1)

PSS CLIENT: TEC | OFFICE LOCATION: Lorton, VA

BILL TO (if different): | PHONE #: 703-567-4348

CONTACT: Karl Ford | EMAIL: Kford@teci.pro

PROJECT NAME: ACPS - Francis Hammond Middle School | PROJECT #: 2471.0002

SITE LOCATION: 4646 Seminary Rd. Alexandria VA | P.O. #: 4920002-001

SAMPLER(S): William S. Hyber

PSS Work Order #: 21082404

PAGE 1 OF 2

(2) (3)

PSS ID	SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE STOP	Time Stop (24hr clock)	Can ID	Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab	Indoor / Ambient Air	TO-15 Full List	Special List	REMARKS
1	Cafeteria 2	8/23/21	0925	8/23/21	1706	9605	12325	29.75	6.5			X	X		
2	Cafeteria 1	↑	0932	↑	1710	00584	13655	30.0	8.2			X	X		
3	Main Gymnasium		0942		1718	3662	04691	30.0	2.0			X	X		
4	C109 Hallway		0947		1726	883	04703	30.0	1.2			X	X		
5	C127 Classroom		0956		1804	9332	04724	30.0	1.0			X	X		
6	Auditorium		1002		1808	609	12319	30.0	4.0			X	X		
7	Admin Office		1014		1737	3678	10941	30.0	6.0			X	X		
8	D108 Classroom		1036		1748	4259	10945	29.7	8.2	8		X	X		
9	159 Hallway		1040		1744	4274	10285	30.0	5.8	4		X	X	/	
10	E109 Classroom	↓	1046	↓	1732	3056	04500	29.25	1.0			X	X		

(5)

Relinquished By:	Date	Time	Received By:
(1) Deanne Johnson	8/24/21	11:30	
(2)			
(3)			
(4)			

(4)

Requested TAT (One TAT per COC)

☐ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Shipping Carrier: Client

Data Deliverables Required:

Special Instructions:

PHASE SEPARATION SCIENCE

TO-15 CHAIN OF CUSTODY FORM

All Fields must be completed accurately. Shaded sections for lab use only.

www.phaseonline.com ~ info@phaseonline.com

6630 Baltimore National Pike ~ Suite 103-A ~ Baltimore, Maryland 21228 ~ (410) 747-8770 ~ (800) 932-9047

(1)

PSS CLIENT: TEC | OFFICE LOCATION: Lorton, VA

BILL TO (if different): | PHONE #: 703-567-4346

CONTACT: Karl Ford | EMAIL: Kford@teci pro

PROJECT NAME: ACPS - Francis Hammond Middle School | PROJECT #: 2471.0002

SITE LOCATION: 4646 Seminary Rd, Alexandria, VA | P.O. #: 4920002-001

SAMPLER(S): William S. Huber

PSS Work Order #: 21082404

PAGE 2 OF 2

(2) (3)

PSS ID	SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE STOP	Time Stop (24hr clock)	Can ID	Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab	Indoor / Ambient Air	TO-15 Full List	Special List	REMARKS
11	B205 Classroom	8/23/21	1055	8/23/21	1820	607	04502	30.0	1.2			X	X	~~X~~	
12	E210 Classroom		1100		1827	612	03604	30.0	2.2			X	X	~~X~~	
13 •	Media Center		1107		1832	4307	04757	30.0	3.0	2		X	X	~~X~~	
14 •	D211 Classroom		1123		1840	3544	04754	30.0	2.5	2		X	X	~~X~~	
15 •	Outside Courtyard		1130		1815	3549	10278	30.0	3.0	4		X	X	~~X~~	*

(5)

Relinquished By: (1)	Date	Time	Received By:
Derrick Johnson	8/24/21	11:30	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Requested TAT (One TAT per COC)

☐ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Shipping Carrier: Client

Data Deliverables Required:

Special Instructions:

This chain of custody is a legal document. The client (Client Name), by signing, or having client's agent sign, this "TO-15 Chain of Custody Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary.

TO-15 Canister and Flow Controller Check List

Check Out	Check In	(use n/a as necessary)
5 ☑	☐	**No. Canisters:**
☑		Pressure Checked (29 – 30" Hg)
☑		Top of Micro QT tight
☑		Sampling tag/label
5 ☑	☐	Stands
5 ☑	☐	**No. Flow controllers:**
	☐	Use COC pressures to evaluate sampling time accuracy
☑	☐	Leak evaluated
☑		Gauge checked / adjusted (29 – 30" Hg)
☑		Flow set
☑		Purged with N
	☐	*Checked for water if soil gas
☐	☐	Duplicate T-piece(s)

Other items in bin:

☑		Hard Copy of O-01.05.F01 TO-15 Client Sampling Guide
☑		COC Form(s) (+1 extra)
☑		Client copy of bottle order
☐		STOP Notice if split IA/SG order
☐	☐	Soil Gas? wrench/nuts/ferules Qty____
☐		Tubing? purged/capped: ft_____
☐	☐	Tubing cutter
☑		Bin labelled, copy of BO for receiving
☑		Client survey response card

Vapor Pins – indicate type: barbed/compression

☐	☐	Vapor Pins with sleeves: Qty_____
☐	☐	Tygon pieces/FLX Fittings: Qty_____
☐	☐	Installation tool
☐	☐	Deadblow hammer
☐	☐	Hole Brush
☐		**Additional Items (see form F06)**

Check Out

BO#/Client: 14270 / Total Environmental Concepts

Assembled/Checked Out: Date/Initials 8/18/21 3M

Serial #s Entered in LIMS: Date/Initials AN 8/18/21

Verified: Date/Initials AN 8/18/21

Check In

Sample Receipt Checklist: Date/Initials: AMC 8/24/21

Work Order No.: 21082404

Checked In: Date/Initials _____

Notes_____

Sample Receipt Checklist (Y/N): To be completed during login

☑ Y *All sample fields completed and accurate: Sample ID; Start/Stop Dates/Times; Canister ID (S/N); Flow Controller ID (S/N); Field Start and Stop Pressures; Soil Gas/Indoor Air.

☑ Y *Sampling times documented in 24 hour clock or am/pm or else verified.

☑ Y *Incoming lab pressure w/in 5" of field stop pressure and < 10" Hg for indoor air and <15" Hg for soil gas.

***These sample check in criteria must be met or the nonconformance must be documented in the Sampling & Login case narrative field of the work order in LIMS and communicated to the PSS project manager for client notification.**

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Sample Receipt Checklist

Project Name: ACPS - Francis Hammond MS
PSS Project No.: 21082404

Client Name Total Environmental Concepts - Lorto
Disposal Date 09/28/2021

Received By Thomas Wingate
Date Received 08/24/2021 11:30:00 AM
Delivered By Client
Tracking No Not Applicable
Logged In By Lynn Jackson

Shipping Container(s)
No. of Coolers 0

Ice N/A
Custody Seal(s) Intact? N/A
Temp (deg C)
Seal(s) Signed / Dated? N/A
Temp Blank Present No

Documentation
Sampler Name W. Scott Huber
COC agrees with sample labels? Yes
MD DW Cert. No. N/A
Chain of Custody Yes

Sample Container
Custody Seal(s) Intact? Not Applicable
Appropriate for Specified Analysis? Yes
Seal(s) Signed / Dated Not Applicable
Intact? Yes
Labeled and Labels Legible? Yes

Holding Time
All Samples Received Within Holding Time(s)? Yes
Total No. of Samples Received 15
Total No. of Containers Received 15

Preservation

Total Metals	(pH<2)	N/A
Dissolved Metals, filtered within 15 minutes of collection	(pH<2)	N/A
Orthophosphorus, filtered within 15 minutes of collection		N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, DOC (field filtered), COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A
524 VOC (Rcvd with trip blanks)	(pH<2)	N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Incoming pressures not taken at PSS for samples 001-007 and 010-012; samples subbed out. Incoming pressures will be taken at subcontracted lab.

Samples Inspected/Checklist Completed By: LY Jackson
Lynn Jackson
Date: 08/24/2021

PM Review and Approval: Amber F Lofer
Amber Lofer
Date: 08/24/2021

PHASE SEPARATION SCIENCE

TO-15 CHAIN OF CUSTODY FORM

All Fields must be completed accurately. Shaded sections for lab use only.

www.phaseonline.com ~ info@phaseonline.com

6630 Baltimore National Pike ~ Suite 103-A ~ Baltimore, Maryland 21228 ~ (410) 747-8770 ~ (800) 932-9047

(1)

PSS CLIENT: TEC | OFFICE LOCATION: Loxton, VA

BILL TO (if different): | PHONE #: 703-567-4346

CONTACT: Karl Ford | EMAIL: Kford@tecinc.com

PROJECT NAME: ACPS - Francis Hammond Middle School | PROJECT #: 2471.0002

SITE LOCATION: 4646 Seminary Rd, Alexandria, VA | P.O. #: 4920002-001

SAMPLER(S): William S. Hyber

PSS Work Order #: 21082404

PAGE 2 OF 2

(2) PSS ID	SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE STOP	Time Stop (24hr clock)	(3) Can ID	Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab	Indoor / Ambient Air	TO-15 Full List	Special List	REMARKS
11	B205 Classroom	8/23/21	1055	8/23/21	1820	607	04502	30.0	1.2			X	X	~~X~~ 15+1	
12	E210 Classroom		1100		1827	512	03604	30.0	2.2			X	X	X	
13 •	Media Center		1107		1832	4307	04757	30.0	3.0	2		X	X	X	
14 •	D211 Classroom		1123		1840	3544	04754	30.0	2.5	2		X	X	X	
15 •	Outside Courtyard		1130		1815	3549	10278	30.0	3.0	4		X	X	X	*

(5)

Relinquished By: (1)	Date	Time	Received By:
Derrick Johnson	8/24/21	11:30	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Requested TAT (One TAT per COC)

☐ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Shipping Carrier: Client

Data Deliverables Required:

Special Instructions:

PHASE SEPARATION SCIENCE

TO-15 CHAIN OF CUSTODY FORM

All Fields must be completed accurately. Shaded sections for lab use only.

www.phaseonline.com ~ info@phaseonline.com

6630 Baltimore National Pike ~ Suite 103-A ~ Baltimore, Maryland 21228 ~ (410) 747-8770 ~ (800) 932-9047

(1)

PSS CLIENT: TEC | OFFICE LOCATION: Lorton, VA

BILL TO (if different): | PHONE #: 703-567-4348

CONTACT: Karl Ford | EMAIL: kford@teciprc

PROJECT NAME: ACPS - Francis Hammond Middle School | PROJECT #: 2471.0002

SITE LOCATION: 4646 Seminary Rd. Alexandria VA | P.O. #: 4920002-001

SAMPLER(S): William S. Huber

PSS Work Order #: 21082404

PAGE 1 OF 2

(2) (3)

PSS ID	SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE STOP	Time Stop (24hr clock)	Can ID	Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab	Indoor / Ambient Air	TO-15 Full List	Special List	REMARKS
1	Cafeteria 2	8/23/21	0925	8/23/21	1706	9605	12325	29.75	6.5			X	X		
2	Cafeteria 1	↓	0932	↓	1710	00584	13655	30.0	8.2			X	X		
3	Main Gymnasium		0942		1718	3552	04691	30.0	2.0			X	X		
4	C109 Hallway		0947		1726	883	04703	30.0	1.2			X	X		
5	C127 Classroom		0956		1804	9332	04724	30.0	1.0			X	X		
6	Auditorium		1002		1808	609	12319	30.0	4.0			X	X		
7	Admin Office		1014		1737	3678	10941	30.0	6.0			X	X		
8	D108 Classroom		1036		1748	4259	10945	29.7	8.2	8		X	X		
9	159 Hallway		1040		1744	4274	10285	30.0	5.8	4		X	X	✓	
10	E109 Classroom		1046		1732	3056	04500	29.25	1.0			X	X		

(5)

Relinquished By:	Date	Time	Received By:
(1) Deanna Johnson	8/24/21	11:30	
(2)			
(3)			
(4)			

(4)

Requested TAT (One TAT per COC)
☐ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Shipping Carrier: Client

Data Deliverables Required:

Special Instructions:

Appendix D: Formaldehyde Analytical Results

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS IAQ Testing
PSS Project No.: 21082541

September 3, 2021

Karl Ford
Total Environmental Concepts - Lorton
8382 Terminal Road, Suite B
Lorton, VA 22079

Reference: PSS Project No: **21082541**
Project Name: ACPS IAQ Testing
Project Location: Francis Hammond
Project ID.: 4920002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21082541**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on September 29, 2021, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS IAQ Testing
PSS Project No.: 21082541

Project ID: 4920002

The following samples were received under chain of custody by Phase Separation Science (PSS) on 08/25/2021 at 05:35 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21082541-001	FH-Cafe	AIR	08/23/21 00:00
21082541-002	FH-Cafe 2	AIR	08/23/21 00:00
21082541-003	FH-Hall C106	AIR	08/23/21 00:00
21082541-004	FH-E109 Class	AIR	08/23/21 00:00
21082541-005	FH-Main Gym	AIR	08/23/21 00:00
21082541-006	FH-Auditorium	AIR	08/23/21 00:00
21082541-007	FH-Main Admin	AIR	08/23/21 00:00
21082541-008	FH-C127 Class	AIR	08/23/21 00:00
21082541-009	FH-D109 Class	AIR	08/23/21 00:00
21082541-010	FH-Hall 159	AIR	08/23/21 00:00
21082541-011	FH-B229 Hallway	AIR	08/23/21 00:00
21082541-012	FH-B205 Class	AIR	08/23/21 00:00
21082541-013	FH-E210 Class	AIR	08/23/21 00:00
21082541-014	FH-E211 Class	AIR	08/23/21 00:00
21082541-015	FH-Library	AIR	08/23/21 00:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS IAQ Testing

PSS Project No.: 21082541

Standard Flags/Abbreviations:

B	A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C	Results Pending Final Confirmation.
E	The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail	The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J	The target analyte was positively identified below the reporting limit but greater than the MDL.
MDL	This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
ND	Not Detected at or above the reporting limit.
RL	PSS Reporting Limit.
U	Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

SGS GALSON

Ms. Amber Confer
Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

September 02, 2021

Account# 15354

Login# L545214

Dear Amber Confer:

Enclosed are the analytical results for the samples received by our laboratory on August 27, 2021. 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
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
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

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 : Phase Separation Science, Inc. Account No.: 15354
Site : FRANCIS HAMMOND Login No. : L545214
Project No. : ACPS IAQ TESTING-4920002
Date Sampled : 23-AUG-21 Date Analyzed : 30-AUG-21
Date Received : 27-AUG-21 Report ID : 1262668

Formaldehyde

Sample ID	Lab ID	Time minutes	Total ug	Conc mg/m3	ppm
FH-CAFE	L545214-1	260	<0.4	<0.01	<0.01
FH-CAFE 2	L545214-2	260	<0.4	<0.01	<0.01
FH-HALL C106	L545214-3	258	<0.4	<0.01	<0.01
FH-E109 CLASS	L545214-4	254	<0.4	<0.01	<0.01
FH-MAIN GYM	L545214-5	253	<0.4	<0.01	<0.01
FH-AUDITORIUM	L545214-6	253	<0.4	<0.01	<0.01
FH-MAIN ADMIN	L545214-7	252	<0.4	<0.01	<0.01
FH-C127 CLASS	L545214-8	240	<0.4	<0.01	<0.01
FH-D108 CLASS	L545214-9	252	<0.4	<0.01	<0.01
FH-HALL 159	L545214-10	252	<0.4	<0.01	<0.01
FH-B229 HALLWAY	L545214-11	245	<0.4	<0.01	<0.01
FH-B205 CLASS	L545214-12	261	<0.4	<0.01	<0.01
FH-E210 CLASS	L545214-13	261	<0.4	<0.01	<0.01
FH-D211 CLASS	L545214-14	262	<0.4	<0.01	<0.01
FH-LIBRARY	L545214-15	239	<0.4	<0.01	<0.01

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

Level of Quantitation: 0.4 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 581

Submitted by: JLL
Date : 02-SEP-21
Supervisor : MWJ

Approved by: MLN

GALSON

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

Client Name : Phase Separation Science, Inc.
Site : FRANCIS HAMMOND
Project No. : ACPS IAQ TESTING-4920002

Date Sampled : 23-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No. : L545214
Date Analyzed: 30-AUG-21

L545214 (Report ID: 1262668):
Total ug corrected for a desorption efficiency of 96%.
FORMALDEHYDE results have been corrected for the average background found on the media:
0.1178 ug for lot #4B21 (samples 1-15).
SOPs: LC-SOP-4(23)

L545214 (Report ID: 1262668):
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
Formaldehyde	+/-12.1%	95.3%

L545214 21082541

SGS GALSON

1Z2313E40166972748
Date: 08/27/21
Shipper: UPS
Initials: MAK
Prep: UNKNOWN

☐ New Client? Client Account No.*:

Report To*: Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.*: 410-747-8770
Cell No.:
Email Results to: Amber Confer
Email address: reporting@phaseonline.com

Invoice To*: Phase Separation Science

Phone No.: 410-747-8770
Email: invoicing@phaseonline.com
P.O. No.:
Credit Card: ☐ Card on File ☐ Call for Credit Card Info.

19-20

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

STX

Site Name: Francis Hammond Project: ACPS IAQ testing - 4920002 Sampled by:

Comments:

List description of industry or Process/interferences present in sampling area:
Public grade school building

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for:
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA ☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4872
FH - CAFE 2	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)*:

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by:	Client	8/26/21	1735	Received by:	[signature]		
Relinquished by:	[signature]			Received by:	Michelle Krause [signature]	8/27/21	1117

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

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page ___ of ___

21082541

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)
www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area : Public grade school building

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for : ☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA ☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - B205 Class	08/23/21	Assay N581 Aldehyde Badge	261	min	Formaldehyde	Fmod. OSHA 1007: TPLC/UV	PD 4092
FH - E210 Class	08/23/21	Assay N581 Aldehyde Badge	261	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5080
FH - D211 Class	08/23/21	Assay N581 Aldehyde Badge	262	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5598
FH - ~~Media Center~~ Library ansbury	08/23/21	Assay N581 Aldehyde Badge	239	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5035
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/25/21	1735	Received by :	[signature]		
Relinquished by :	[signature]			Received by :	Michelle Krause [signature]	8/27/21	1107

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

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page____ of ____

Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

For Questions or issues please contact: Amber Confer

W.O. No. : **21082541**
Project Location : Francis Hammond
Project Number : 4920002
Report To LOD : No

Report Due On :09/03/21 05:00

Samples Transferred To:
SGS North America - NY
6601 Kirkville Road
East Syracuse, NY 13057

Old SGS Galson Labs. bsc
Phone : 315-432-5227

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21082541-001	FH-Cafe	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-002	FH-Cafe 2	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-003	FH-Hall C106	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-004	FH-E109 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-005	FH-Main Gym	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-006	FH-Auditorium	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-007	FH-Main Admin	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-008	FH-C127 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-009	FH-D109 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-010	FH-Hall 159	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-011	FH-B229 Hallway	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-012	FH-B205 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-013	FH-E210 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-014	FH-E211 Class	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21082541-015	FH-Library	08/23/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON

Data Deliverables Required: COA

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send InvoiceAttn : invoicing@phaseonline.com

Airbill No.: _____ Carrier : UPS

Condition Upon Receipt : _____

Comments :

Samples Relinquished By : _____ Date : _____ Time: _____ Samples Received By : _____

Samples Relinquished By: _____ Date : _____ Time : _____ Samples Received By: _____

Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: _____ 8/27/21 11:17

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Project Name: ACPS IAQ Testing

PSS Project No.: 21082541

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

Container label for COC sample 015 reads Library. Per client, logged in as Library.

21082541: Analyses associated with analyst code 4051 were performed by
SGS North America - NY, 6601 Kirkville Road, East Syracuse, NY 13057 - NY 11626

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

21082541

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :
Public grade school building

State samples were collected in (e.g., NY)
VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4872
FH - CAFE 2	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/23/21	1735	Received by :	[illegible]		
Relinquished by :	[illegible]			Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page___ of ___

21082541

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area : Public grade school building

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for : ☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA ☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - B205 Class	08/23/21	Assay N581 Aldehyde Badge	261	min	Formaldehyde	Fmod. OSHA 1007: TPLC/UV	PD 4092
FH - E210 Class	08/23/21	Assay N581 Aldehyde Badge	261	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5080
FH - D211 Class	08/23/21	Assay N581 Aldehyde Badge	262	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5598
FH - ~~Media Center~~ Library [initials]	08/23/21	Assay N581 Aldehyde Badge	239	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5035
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	
		Assay N581 Aldehyde Badge		min	Formaldehyde	mod. OSHA 1007: TPLC/UV	

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/25/21	1735	Received by :	[signature]		
Relinquished by :	[signature]			Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page____ of ____

 Version 1.000

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Sample Receipt Checklist

Project Name: ACPS IAQ Testing
PSS Project No.: 21082541

Client Name Total Environmental Concepts - Lorto
Disposal Date 09/29/2021

Received By Amber Confer
Date Received 08/25/2021 05:35:00 PM
Delivered By Client
Tracking No Not Applicable
Logged In By Amber Confer

Shipping Container(s)
No. of Coolers 0

Ice N/A
Custody Seal(s) Intact? N/A
Temp (deg C)
Seal(s) Signed / Dated? N/A
Temp Blank Present No

Documentation
Sampler Name Not Provided
COC agrees with sample labels? No
N/A
Chain of Custody Yes

Sample Container
Custody Seal(s) Intact? Not Applicable
Appropriate for Specified Analysis? Yes
Seal(s) Signed / Dated Not Applicable
Intact? Yes
Labeled and Labels Legible? Yes

Holding Time
Total No. of Samples Received 15
All Samples Received Within Holding Time(s)? Yes
Total No. of Containers Received 15

Preservation

Total Metals	(pH<2)	N/A
Dissolved Metals, filtered within 15 minutes of collection	(pH<2)	N/A
Orthophosphorus, filtered within 15 minutes of collection		N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, DOC (field filtered), COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A
524 VOC (Rcvd with trip blanks)	(pH<2)	N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Container label for COC sample 015 reads Library. Per client, logged in as Library.

Samples Inspected/Checklist Completed By: Amber Confer — Date: 08/26/2021

PM Review and Approval: Lynn Jackson — Date: 08/26/2021

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :

Public grade school building

State samples were collected in (e.g., NY)

VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :				Received by :			
Relinquished by :				Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☐ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :

Public grade school building

State samples were collected in (e.g., NY)

VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4872
FH - CAFE 2	08/23/21	Assay N581 Aldehyde Badge	259	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :				Received by :			
Relinquished by :				Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Appendix E: 4-PCH Analytical Results

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: ACPS IAQ Testing
PSS Project No.: 21082540

September 3, 2021

Karl Ford
Total Environmental Concepts - Lorton
8382 Terminal Road, Suite B
Lorton, VA 22079

Reference: PSS Project No: **21082540**
Project Name: ACPS IAQ Testing
Project Location: Francis Hammond
Project ID.: 4920002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21082540**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on September 29, 2021, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS IAQ Testing

PSS Project No.: 21082540

Project ID: 4920002

The following samples were received under chain of custody by Phase Separation Science (PSS) on 08/25/2021 at 05:35 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21082540-001	FH-Cafe	AIR	08/23/21 00:00
21082540-002	FH-Cafe 2	AIR	08/23/21 00:00
21082540-003	FH-Hall C106	AIR	08/23/21 00:00
21082540-004	FH-E109 Class	AIR	08/23/21 00:00
21082540-005	FH-Main Gym	AIR	08/23/21 00:00
21082540-006	FH-Auditorium	AIR	08/23/21 00:00
21082540-007	FH-Main Admin	AIR	08/23/21 00:00
21082540-008	FH-C127 Class	AIR	08/23/21 00:00
21082540-009	FH-D108 Class	AIR	08/23/21 00:00
21082540-010	FH-Hall 159	AIR	08/23/21 00:00
21082540-011	FH-B229 Hallway	AIR	08/23/21 00:00
21082540-012	FH-B205 Class	AIR	08/23/21 00:00
21082540-013	FH-E210 Class	AIR	08/23/21 00:00
21082540-014	FH-D211 Class	AIR	08/23/21 00:00
21082540-015	FH-Library	AIR	08/23/21 00:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Explanation of Qualifiers

Project Name: ACPS IAQ Testing

PSS Project No.: 21082540

Standard Flags/Abbreviations:

B	A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C	Results Pending Final Confirmation.
E	The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail	The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J	The target analyte was positively identified below the reporting limit but greater than the MDL.
MDL	This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
ND	Not Detected at or above the reporting limit.
RL	PSS Reporting Limit.
U	Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

SGS GALSON

Ms. Amber Confer
Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

September 03, 2021

Account# 15354

Login# L545245

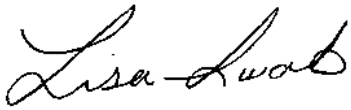
Dear Amber Confer:

Enclosed are the analytical results for the samples received by our laboratory on August 27, 2021. 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
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
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

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 : Phase Separation Science, Inc. Account No.: 15354
Site : FRANCIS HAMMOND Login No. : L545245
Project No. : ACPS IAQ TESTING-4920002
Date Sampled : 23-AUG-21 Date Analyzed : 30-AUG-21 - 31-AUG-21
Date Received : 27-AUG-21 Report ID : 1262694

4-Phenylcyclohexene (4PCH low LOQ)

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc mg/m3	ppm
FH-CAFE	L545245-1	52	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-CAFE 2	L545245-2	51.8	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-HALL C106	L545245-3	51.6	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-E109 CLASS	L545245-4	50.8	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-MAIN GYM	L545245-5	50.6	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-AUDITORIUM	L545245-6	50.6	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-MAIN ADMIN	L545245-7	50.4	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-C127 CLASS	L545245-8	48	<0.2	<0.2	<0.2	<0.004	<0.0007
FH-D108 CLASS	L545245-9	50.4	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-HALL 159	L545245-10	50.4	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-B229 HALLWAY	L545245-11	49	<0.2	<0.2	<0.2	<0.004	<0.0007
FH-B205 CLASS	L545245-12	52.2	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-E210 CLASS	L545245-13	53	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-D211 CLASS	L545245-14	52.4	<0.2	<0.2	<0.2	<0.004	<0.0006
FH-LIBRARY	L545245-15	47.8	<0.2	<0.2	<0.2	<0.004	<0.0007

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

Level of Quantitation: 0.2 ug
Analytical Method : mod. NIOSH 1501; GC/PID
Collection Media : 226-01

Submitted by: ECB
Date : 03-SEP-21
Supervisor : KAG

Approved by: MLN

GALSON

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

Client Name : Phase Separation Science, Inc.
Site : FRANCIS HAMMOND
Project No. : ACPS IAQ TESTING-4920002

Date Sampled : 23-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No. : L545245
Date Analyzed: 30-AUG-21 - 31-AUG-21

L545245 (Report ID: 1262694):
Total ug corrected for a desorption efficiency of 97%.
SOPs: GC-SOP-16(26), GC-SOP-8(27), GC-SOP-12(20)

L545245 (Report ID: 1262694):
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
4-Phenylcyclohexene (4PCH low LOQ)	+/-18%	88.2%

1545245 21082540

SGS GALSON

1Z2313E40166972748
Date:08/27/21
Shipper:UPS
Initials:MAK
Prep:UNKNOWN

☐ New Client?

Report To*: Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Client Account No.*:

Phone No.*: 410-747-8770
Cell No.:
Email Results to: Amber Confer
Email address: reporting@phaseonline.com

Invoice To*: Phase Separation Science

Phone No.: 410-747-8770
Email: invoicing@phaseonline.com
P.O. No.:
Credit Card: ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name: Francis Hammond Project: ACPS IAQ testing - 4920002 Sampled by:

Comments:

List description of industry or Process/interferences present in sampling area: Public grade school

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for:
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Sm Charcoal tubes / 226-01	52.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - CAFE 2	08/23/21	Sm Charcoal tubes / 226-01	51.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Hall C106	08/23/21	Sm Charcoal tubes / 226-01	51.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - E109 Class	08/23/21	Sm Charcoal tubes / 226-01	50.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Main Gym	08/23/21	Sm Charcoal tubes / 226-01	50.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Auditorium	08/23/21	Sm Charcoal tubes / 226-01	50.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Main Admin	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - C127 Class	08/23/21	Sm Charcoal tubes / 226-01	48.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - D108 Class	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Hall 159	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - B229 Hallway	08/23/21	Sm Charcoal tubes / 226-01	49.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)*:

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by:	Client	8/25/21	1735	Received by:			
Relinquished by:				Received by	Michelle Krause	8/27/21	1122

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

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 1 of 2

21082540

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area : Public grade school

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for : ☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA ☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - B205 Class	08/23/21	Sm Charcoal tubes / 226-01	52.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - E210 Class	08/23/21	Sm Charcoal tubes / 226-01	53.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - D211 Class	08/23/21	Sm Charcoal tubes / 226-01	52.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - ~~Media Center~~ Library ac 8/26/21	08/23/21	Sm Charcoal tubes / 226-01	47.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/25/21	1735	Received by :	[signature]		
Relinquished by :	[signature]			Received by :	Michelle Krause [signature]	8/27/21	1117

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

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 2 of 2

Chain of Custody Form for Subcontracted Analyses

Phase Separation Science, Inc
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

For Questions or issues please contact: Amber Confer

W.O. No. : **21082540**
Project Location : Francis Hammond
Project Number : 4920002
Report To LOD : No

Report Due On :09/03/21 05:00

Samples Transferred To:
SGS North America - NY
6601 Kirkville Road
East Syracuse, NY 13057

Old SGS Galson Labs. bsc
Phone : 315-432-5227

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21082540-001	FH-Cafe	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-002	FH-Cafe 2	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-003	FH-Hall C106	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-004	FH-E109 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-005	FH-Main Gym	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-006	FH-Auditorium	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-007	FH-Main Admin	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-008	FH-C127 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-009	FH-D108 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-010	FH-Hall 159	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-011	FH-B229 Hallway	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-012	FH-B205 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-013	FH-E210 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-014	FH-D211 Class	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21082540-015	FH-Library	08/23/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON

Data Deliverables Required: COA

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send InvoiceAttn : invoicing@phaseonline.com

Airbill No.: _____ Carrier : UPS

Condition Upon Receipt : _____

Comments :

Samples Relinquished By : [signature] Date : _____ Time: _____ Samples Received By : _____

Samples Relinquished By: _____ Date : _____ Time : _____ Samples Received By: _____

Samples Relinquished By: _____ Date: _____ Time: _____ Samples Received By: Michelle Krause Michelle Krause 8/27/21 11:17

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Project Name: ACPS IAQ Testing

PSS Project No.: 21082540

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

Container label for COC sample 015 reads Library. Per client, logged in as Library.

21082540: Analyses associated with analyst code 4051 were performed by
SGS North America - NY, 6601 Kirkville Road, East Syracuse, NY 13057 - NY 11626

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

21082540

GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :
Public grade school

State samples were collected in (e.g., NY)
VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Sm Charcoal tubes / 226-01	52.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - CAFE 2	08/23/21	Sm Charcoal tubes / 226-01	51.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Hall C106	08/23/21	Sm Charcoal tubes / 226-01	51.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - E109 Class	08/23/21	Sm Charcoal tubes / 226-01	50.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Main Gym	08/23/21	Sm Charcoal tubes / 226-01	50.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Auditorium	08/23/21	Sm Charcoal tubes / 226-01	50.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Main Admin	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - C127 Class	08/23/21	Sm Charcoal tubes / 226-01	48.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - D108 Class	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - Hall 159	08/23/21	Sm Charcoal tubes / 226-01	50.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - B229 Hallway	08/23/21	Sm Charcoal tubes / 226-01	49.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson Laboratories will subsitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/25/21	1735	Received by :	[signature]		
Relinquished by :	[signature]			Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

21082540

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Client Account No.*:

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science
Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☑ 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%

Site Name : Francis Hammond   Project : ACPS IAQ testing - 4920002   Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area : Public grade school

State samples were collected in (e.g., NY): VA

Please indicate which OEL this data will be used for : ☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA ☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - B205 Class	08/23/21	Sm Charcoal tubes / 226-01	52.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - E210 Class	08/23/21	Sm Charcoal tubes / 226-01	53.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - D211 Class	08/23/21	Sm Charcoal tubes / 226-01	52.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
FH - ~~Media Center~~ Library ac 8/26/21	08/23/21	Sm Charcoal tubes / 226-01	47.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	
		Sm Charcoal tubes / 226-01			4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :	Client	8/25/21	1735	Received by :	Amber Confer		
Relinquished by :	Amber Confer			Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 2 of 2

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Sample Receipt Checklist

Project Name: ACPS IAQ Testing
PSS Project No.: 21082540

Client Name	Total Environmental Concepts - Lortc	**Received By**	Amber Confer
Disposal Date	09/29/2021	**Date Received**	08/25/2021 05:35:00 PM
		Delivered By	Client
		Tracking No	Not Applicable
		Logged In By	Amber Confer

Shipping Container(s)

No. of Coolers 0

		Ice	N/A
Custody Seal(s) Intact?	N/A	Temp (deg C)	
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No
Documentation		Sampler Name	Not Provided
COC agrees with sample labels?	No		N/A
Chain of Custody	Yes		
Sample Container		Custody Seal(s) Intact?	Not Applicable
Appropriate for Specified Analysis?	Yes	Seal(s) Signed / Dated	Not Applicable
Intact?	Yes		
Labeled and Labels Legible?	Yes		
Holding Time		Total No. of Samples Received	15
All Samples Received Within Holding Time(s)?	Yes	Total No. of Containers Received	15

Preservation

Total Metals	(pH<2)	N/A
Dissolved Metals, filtered within 15 minutes of collection	(pH<2)	N/A
Orthophosphorus, filtered within 15 minutes of collection		N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, DOC (field filtered), COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	N/A
Do VOA vials have zero headspace?		N/A
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A
524 VOC (Rcvd with trip blanks)	(pH<2)	N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Container label for COC sample 015 reads Library. Per client, logged in as Library.

Samples Inspected/Checklist Completed By: Amber F Confer — Date: 08/26/2021
Amber Confer

PM Review and Approval: N L Jackson — Date: 08/26/2021
Lynn Jackson

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☐ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :

Public grade school building

State samples were collected in (e.g., NY)

VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4872
FH - CAFE 2	08/23/21	Assay N581 Aldehyde Badge	259	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :				Received by :			
Relinquished by :				Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

SGS GALSON

6601 Kirkville Rd
East Syracuse, NY 13057
Tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Client Account No.*:

Report To* : Phase Separation Science
6630 Baltimore National Pike
Baltimore, MD 21228

Phone No.* : 410-747-8770
Cell No. :
Email Results to : Amber Confer
Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
Email : invoicing@phaseonline.com
P.O. No. :
Credit Card : ☐ Card on File ☐ Call for Credit Card Info.

☑ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
☐ 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%

Site Name : Francis Hammond Project : ACPS IAQ testing - 4920002 Sampled by :

Comments :

List description of industry or Process/interferences present in sampling area :

Public grade school building

State samples were collected in (e.g., NY)

VA

Please indicate which OEL this data will be used for :
☑ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
FH - CAFE	08/23/21	Assay N581 Aldehyde Badge	260	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4872
FH - CAFE 2	08/23/21	Assay N581 Aldehyde Badge	259	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5034
FH - Hall C106	08/23/21	Assay N581 Aldehyde Badge	258	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5315
FH - E109 Class	08/23/21	Assay N581 Aldehyde Badge	254	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5043
FH - Main Gym	/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5422
FH - Auditorium	08/23/21	Assay N581 Aldehyde Badge	253	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4588
FH - Main Admin	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5387
FH - C127 Class	08/23/21	Assay N581 Aldehyde Badge	240	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4511
FH - D108 Class	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4162
FH - Hall 159	08/23/21	Assay N581 Aldehyde Badge	252	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 5588
FH - B229 Hallway	08/23/21	Assay N581 Aldehyde Badge	245	min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD 4825

^Galson Laboratories will subsitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☑ Use method(s) listed on COC

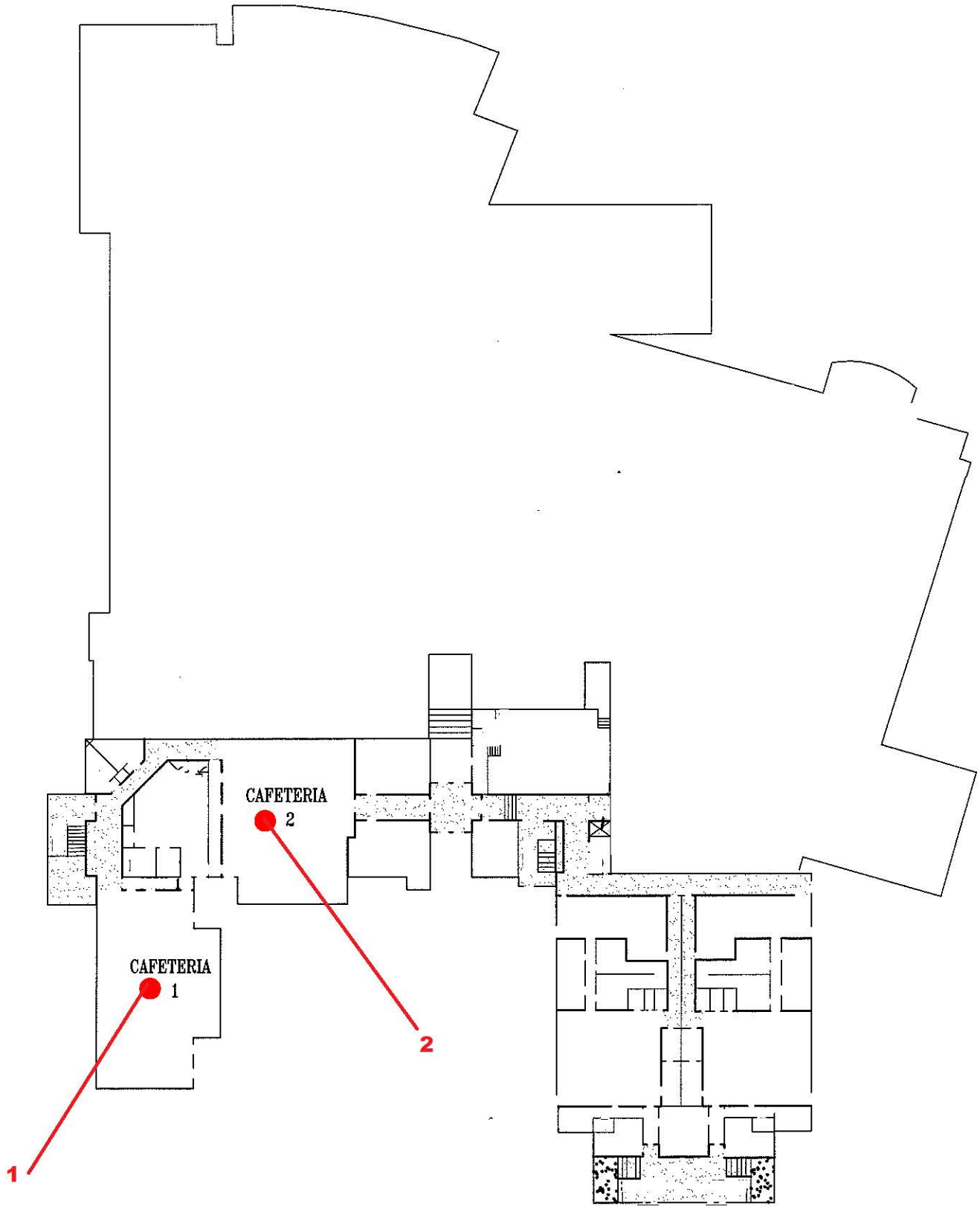
For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)* :

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by :				Received by :			
Relinquished by :				Received by :			

Samples received after 3pm will be considered as next day's business
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Appendix F: Sampling Locations



FRANCIS C. HAMMOND JR. SCHOOL

4646 Seminary Road
Alexandria, Va 22304

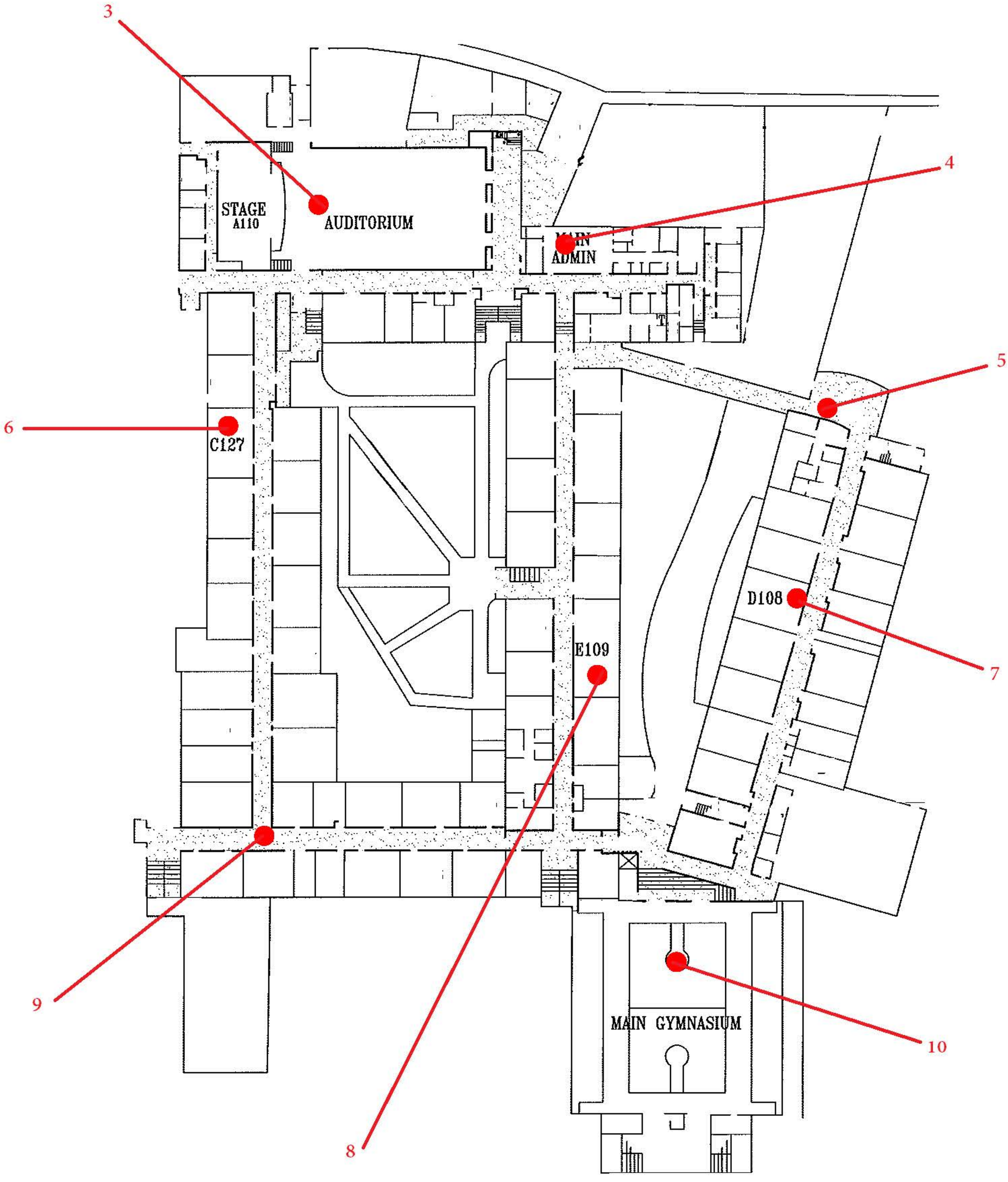
BASEMENT PLAN

LEGEND

- Sample Location Analyzed For:
  - Mold
  - Radon
  - VOC's (TO+15)
  - 4-polycyclohexene
  - Formaldehyde

Total Environmental Concepts, Inc.
8382 Terminal Road, Suite B
Lorton, VA 22079
Phone: 703-567-4346
Fax: 703-567-3487

Figure 1



LEGEND

● Sample Location Analyzed For:

Mold
Radon
VOC's (TO+15)
4-polycyclohexene
Formaldehyde

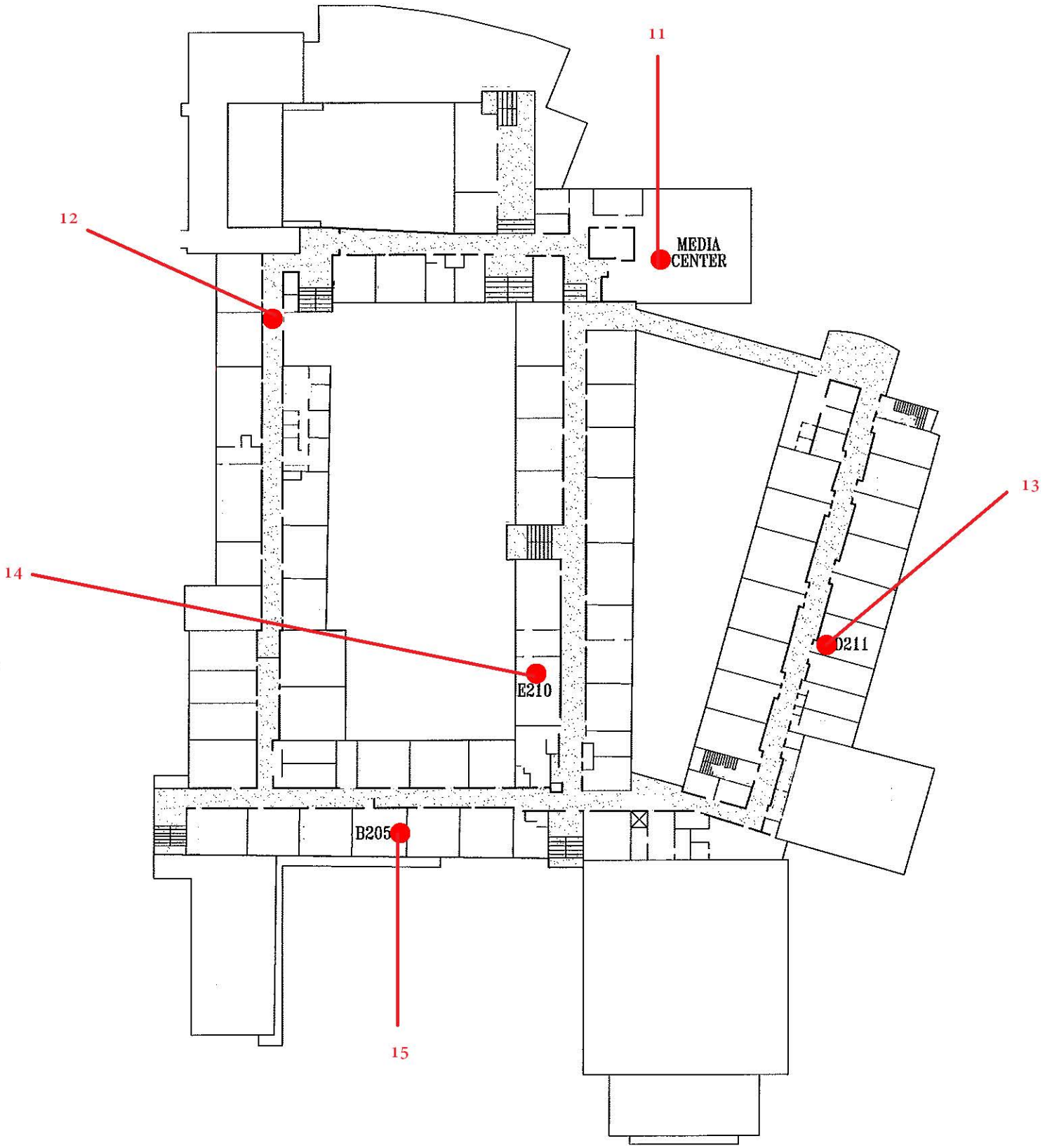
FRANCIS C. HAMMOND JR. SCHOOL

4646 Seminary Road
Alexandria, Va 22304

FIRST FLOOR

Total Environmental Concepts, Inc.
8382 Terminal Road, Suite B
Lorton, VA 22079
Phone: 703-567-4346
Fax: 703-567-3487

Figure 2



FRANCIS C. HAMMOND JR. SCHOOL

4646 Seminary Road
Alexandria, Va 22304

SECOND FLOOR

LEGEND

- Sample Location Analyzed For:
  - Mold
  - Radon
  - VOC's (TO+15)
  - 4-polycyclohexene
  - Formaldehyde

Total Environmental Concepts, Inc.
8382 Terminal Road, Suite B
Lorton, VA 22079
Phone: 703-567-4346
Fax: 703-567-3487

Figure 3

Appendix G: Photographs

Francis C Hammond, Media Center

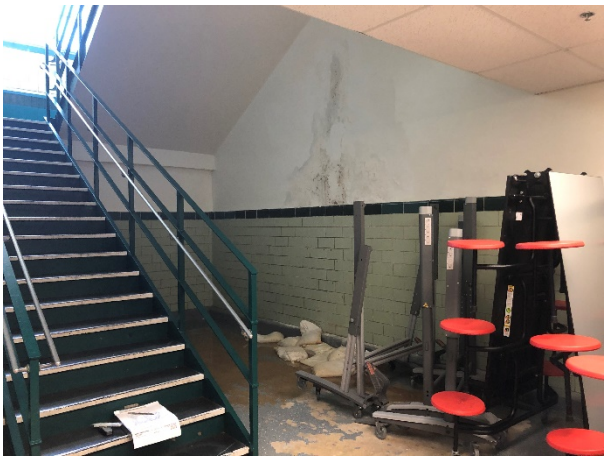
Francis C Hammond, Cafeteria-1

Francis C Hammond, Auditorium

Francis C Hammond, Classroom

Francis C Hammond, Gym

Francis C Hammond, Hallway



Francis C Hammond, Stairwell by Café-1

Francis C Hammond, Stairwell View of Floor

Francis C Hammond, Stairwell View of Water Damage

Francis C Hammond, Stairwell View of Mold

Francis C Hammond, C212

Francis C Hammond, C127

Francis C Hammond, Hallway by Room B229