

Setting the Standard in Comprehensive Environmental Solutions

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



# **Indoor Air Quality Assessment Report**

at

### **John Adams Elementary School**

5651 Rayburn Ave, Alexandria, VA 22311



#### Report Prepared for.

John Contreras Alexandria City Public Schools

2601 Cameron Mills Rd, Alexandria, VA 22302

Dated: October 7, 2021

Toll Free: 877.457.TECI

www.totalenvironmental.net

Gaithersburg

Baltimore

Lorton

Richmond

# TABLE OF CONTENTS

1	Executive Summary 1									
2	Asses	sment Methods	3							
3	Visua	Visual Observations 6								
4	Condi	tions for Human Occupancy	8							
	4.1	Temperature	8							
	4.2	Relative Humidity	8							
	4.3	Carbon Dioxide	9							
	4.4	Carbon Monoxide	9							
	4.5	Multi-Gas	9							
5	Mold	Sampling Results	9							
6	Rador	Gas Sampling Results	10							
7	Forma	aldehyde Gas Sampling Results	11							
8	TO+15	5 (VOCs) Sampling Results	11							
9	4-PCH	Sampling Results	. 11							
10	Multi-	Gas detector (MSA Altair Multi-gas) Readings – Oxygen, VOCs, Hydro	ger							
	Sulfid	e	11							
11	Qualit	y Control Program	14							

#### **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 TechnologyNVLAP 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 MinuteNTE Not to exceed°F degree FahrenheitPPM 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 assessed last. 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)
- Naomi Brooks Elementary School (NB)
- 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 John Adams Elementary School on Thursday, August 19, 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 a 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. ACPS required that TEC test for the following major indoor air pollutants:

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

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 recommendations during this limited IAQ investigation:

Mold – TEC conducted site-specific mold sampling outside at John Adams 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:

The number of spores in the air were within acceptable ranges in all locations as compared to background outside air mold spore counts. Photographs can be found in Section 3, Visual Observations.

#### **Recommendations:**

- Moving forward, any suspected mold growth should be inspected by 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 the building foundation.
- For all HVAC and associated building systems, a detailed schedule of maintenance should be established and adhered to.

None of the results from the fifteen sampling locations at John Adams Elementary School were indicative of mold issues.

- 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

Under the direction of TEC Industrial Hygienist Nikki Satari; Margaret Stanger, Victoria Powers, and Channing Jackson, also of TEC, conducted IAQ inspections and air sampling on August 19, 2021. All air samples were collected three-six feet from floor level, the typical breathing zone for adults.

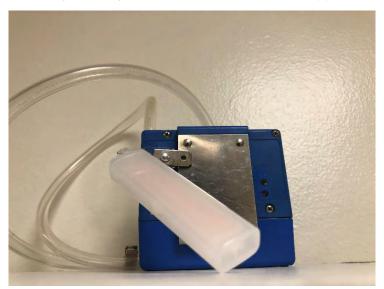
Mold air samples were collected with a field calibrated Environmental Monitoring Systems High Volume Sampling Pump on Allergenco-D Disposable IAQ Air Monitoring Cassettes at a flow rate of 10 liters per minute for a sample volume of 75 liters during the assessment (photograph below). The Hayes Microbial 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. <u>Visual Observations</u>

Sample Location	August 19, 2021	Visual Observations
Library	Water staining observed in the library.	

Library	View of water staining observed in the library.	
Hall 214	Water staining observed in the second floor hallway of John Adams Elementary School.	
Hall 214	View of water staining observed in the second floor hallway of John Adams Elementary School.	

Gym Construction activity observed in the gym of John Adams Elementary School. EAGER TO SOA

#### 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

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

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

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

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 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.

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, and indoors this may indicate water leaks or high indoor humidity.

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

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 by a qualified professional. The mold in air results do not indicate a need for mold abatement at this time. but conditions may worsen if the issues with leaks and water intrusion are not addressed. The observed ratio anomalies are most likely caused by a combination of the normal fluctuation in daily spore counts and the issues with water intrusion.

#### Findings:

The number of spores in the air were within acceptable ranges in all locations as compared to background outside air mold spore counts. 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 the building foundation.
- For all HVAC and associated building systems, a detailed schedule of maintenance should be established and adhered to.

None of the results from the fifteen sampling locations at John Adams Elementary School were indicative of mold issues.

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 "newcarpet" 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	СО	OXYGEN	H2S						
Gym	0.1	0.0	20.9	0.0						
125	0.0	0.0	20.9	0.0						
140	0.0	0.0	20.3	0.0						
147	0.0	0.0	20.1	0.0						
Hall 148	0.0	0.0	20.9	0.0						
Cafeteria	0.0	0.0	20.3	0.0						
164	0.0	0.0	20.9	0.0						
Lobby	0.0	0.0	20.9	0.0						
116	0.0	0.0	20.9	0.0						
109	0.3	0.0	20.5	0.0						
Library	0.0	0.0	20.6	0.0						
202	0.0	0.0	20.7	0.0						
222	0.0	0.0	20.9	0.0						
Hall 213	0.0	0.0	20.9	0.0						
157	0.0	0.0	20.9	0.0						

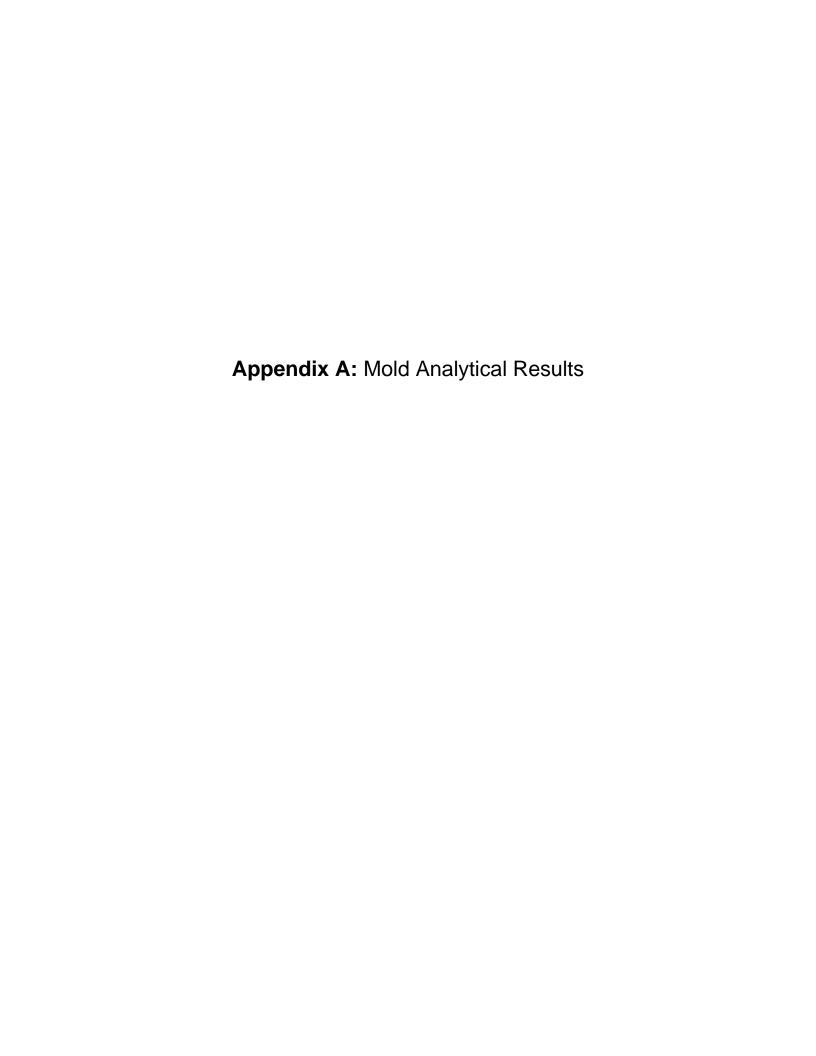
Table 2

Results of Analytes by Location									
Location	Radon	Mold AVG: 77 F AVG: 61 %		TO+15 VOCs	4РСН	Formaldehyde			
Gym	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
125	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
140	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
147	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
Hall 148	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
Cafeteria	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
164	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
Lobby	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
116	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
109	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
Library	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
202	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
222	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
Hall 213	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			
157	< 4 pCi/L	Spore Cou	ınt Normal	< RSL	< 6.5 ug/m3	< RSL			

<sup>\*</sup>See Section 5 - Ratio abnormalities are most likely caused by fluctuations in daily spore counts

#### 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.







Analysis Report prepared for

# Total Environmental Concepts, Inc.

8382 Terminal Road Suite B Lorton, VA 22079

Phone: (571) 289-2173

John Adams ES

Collected: October 4, 2021 Received: October 6, 2021 Reported: October 6, 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 October 6th, 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



phon N. Hoyes

Lab ID: #188863



DPH License: #PH-0198

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

Spore Trap SOP - HMC#101

Sample Number	1	JAA31	8807	2	2 JAA318801		3	JAA3	18795	4	JA431	18796	
Sample Name	J	A - Outdoor		•	JA - Lobby			JA - Office 157			JA - Class 164		
Sample Volume		75.00 liter		75.00 liter			75.00 liter			75.00 liter			
Reporting Limit		13 spores/m³			13 spores/m <sup>3</sup>	l		13 spores/m <sup>3</sup>		13 spores/m <sup>3</sup>			
Background		2			2			2		2			
Fragments		ND			ND			ND			ND		
								2	I		2		
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	
Alternaria													
Ascospores	36	480	43.4%	15	200	17.0%	11	147	73.3%	2	27	66.7%	
Aspergillus Penicillium	2	27	2.4%										
Basidiospores	13	173	15.7%	8	107	9.1%	3	40	20.0%	1	13	33.3%	
Bipolaris Drechslera	3	40	3.6%										
Chaetomium													
Cladosporium	25	333	30.1%	60	800	68.2%	1	13	6.7%				
Curvularia				1	13	1.1%							
Epicoccum				1	13	1.1%							
Fusarium													
Memnoniella													
Myxomycetes	2	27	2.4%	1	13	1.1%							
Pithomyces	1	13	1.2%	2	27	2.3%							
Stachybotrys													
Stemphylium													
Torula													
Ulocladium													
Polythrincium	1	13	1.2%										
Total	83	1106	100%	88	1173	100%	15	200	100%	3	40	100%	
Water Damage Indicato	r	Commo	n Allergen		Slightly Higher	than Baseline	Signi	ficantly Higher	than Baseline		Ratio Abnormal	ity	

HAYES
MICROBIAL CONSULTING

Collected: Oct 4, 2021

Received: Oct 6, 2021

Reported: Oct 6, 2021

Reviewed By:

Date:

Project Analyst: Ramesh Poluri, PhD

· Ramexh

10 - 06 - 2021

Date:

Steve Hayes, BSMT Stephen 11. Abyls

10 - 06 - 2021

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

Spore Trap SOP - HMC#101

Sample Number	5	JA431	8802	6	JA431	8800	7	JA431	8809	8 JA4318790			
Sample Name	JA - Class 109			JA	JA - Class 116			JA - Class 125			JA - Gym		
Sample Volume		75.00 liter		75.00 liter			75.00 liter			75.00 liter			
Reporting Limit		13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>		
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
		3			3			3			3		
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	
Alternaria													
Ascospores	2	27	100.0%	2	27	25.0%	1	13	20.0%	3	40	100.0%	
Aspergillus Penicillium							4	53	80.0%				
Basidiospores													
Bipolaris Drechslera													
Chaetomium													
Cladosporium													
Curvularia													
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes				5	67	62.5%							
Pithomyces				1	13	12.5%							
Stachybotrys													
Stemphylium													
Torula													
Ulocladium													
Polythrincium													
Total	2	27	100%	8	107	100%	5	66	100%	3	40	100%	

MICROBIAL CONSULTING

Water Damage Indicator

Common Allergen

Slightly Higher than Baseline

Significantly Higher than Baseline

Ratio Abnormality

Collected: Oct 4, 2021

Received: Oct 6, 2021

Reported: Oct 6, 2021

Project Analyst:

Ramesh Poluri, PhD

Date:

10 - 06 - 2021

Reviewed By:

Steve Hayes, BSMT

Date:

10 - 06 - 2021

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

Spore Trap SOP - HMC#101

Sample Number			9 JA4318810 10 JA4318811			18811	11 JA4315119			12 JA4318805			
Sample Name	JA	A - Class 19	0	J#	JA - Class 147			JA - Cafe			JA - Hall 148-156		
Sample Volume		75.00 liter		75.00 liter			75.00 liter			75.00 liter			
Reporting Limit		13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>	1		13 spores/m <sup>3</sup>		13 spores/m <sup>3</sup>			
Background		2			2			2			2		
Fragments		ND			ND			ND			13/m <sup>3</sup>		
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	
Alternaria													
Ascospores	1	13	100.0%	1	13	20.0%	2	27	28.6%	2	27	66.7%	
Aspergillus Penicillium				3	40	60.0%	5	67	71.4%				
Basidiospores													
Bipolaris Drechslera													
Chaetomium													
Cladosporium										1	13	33.3%	
Curvularia													
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes				1	13	20.0%							
Pithomyces													
Stachybotrys													
Stemphylium													
Torula													
Ulocladium													
Polythrincium													
Total	1	13	100%	5	66	100%	7	94	100%	3	40	100%	



Water Damage Indicator

Collected: Oct 4, 2021

Common Allergen

Received: Oct 6, 2021

Slightly Higher than Baseline

Reported: Oct 6, 2021

Date:

Ratio Abnormality

Project Analyst: Ramesh Poluri, PhD

Date: 10 - 06 - 2021 Reviewed By:

Steve Hayes, BSMT

Significantly Higher than Baseline

10 - 06 - 2021

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

Spore Trap SOP - HMC#101

Sample Number			14 JA			15	JA431	8791	16	JA43	18797	
Sample Name	JA -	- Media Cen	iter	JA - Class 202			JA - Hall 213-216			JA - Class 222		
Sample Volume		75.00 liter		75.00 liter			75.00 liter			75.00 liter		
Reporting Limit		13 spores/m³			13 spores/m³			13 spores/m <sup>3</sup>		13 spores/m <sup>3</sup>		
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
		3			3						3	
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total
Alternaria												
Ascospores	1	13	33.3%	3	40	60.0%	3	40	25.0%	1	13	100.0%
Aspergillus Penicillium												
Basidiospores	1	13	33.3%	1	13	20.0%	1	13	8.3%			
Bipolaris Drechslera												
Chaetomium												
Cladosporium							7	93	58.3%			
Curvularia							1	13	8.3%			
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes	1	13	33.3%									
Pithomyces				1	13	20.0%						
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Polythrincium												
Total	3	39	100%	5	66	100%	12	159	100%	1	13	100%

MICROBIAL CONSULTING

Water Damage Indicator

Collected: Oct 4, 2021

Common Allergen

Slightly Higher than Baseline

Date:

Significantly Higher than Baseline

Ratio Abnormality

Received: Oct 6, 2021

Reported: Oct 6, 2021

Project Analyst: Ramesh Poluri, PhD

10 - 06 - 2021

Reviewed By:

Steve Hayes, BSMT

Date:

10 - 06 - 2021

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112

(804) 562-3435

contact@hayesmicrobial.com

**Gary Lewis Total Environmental Concepts, Inc.** 

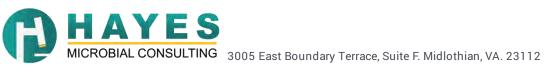
John Adams ES

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

#### **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:
	<ul> <li>NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)</li> <li>1: &lt;5% of field occluded. No spores will be uncountable.</li> <li>2: 5-25% of field occluded.</li> <li>3: 25-75% of field occluded.</li> <li>4: 75-90% of field occluded.</li> <li>5: &gt;90% of field occluded. Suggested recollection of sample.</li> </ul>
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	Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.
Common Allergen	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.
Slightly Higher than Baseline	Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.
Significantly Higher than Baseline	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
Ratio Abnormality	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 indoc 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.



**Gary Lewis Total Environmental Concepts, Inc.** 

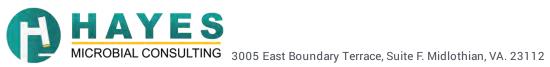
John Adams ES

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

#### **Organism Descriptions**

Ascospores		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		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.
		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		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.
Bipolaris Drechslera	Habitat:	They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.
		They may be allergenic and are very commonly involved in allergic fungal sinusitis. They are opportunistic pathogens but occasionally infect healthy individuals, causing keratitis, sinusitis and osteomyelitis.
Cladosporium		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.
Curvularia	Habitat:	They exist in soil and plant debris, and are plant pathogens.
		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.



**Gary Lewis Total Environmental Concepts, Inc.** 

John Adams ES

#21039545

8382 Terminal Road Suite B Lorton, VA 22079 (571) 289-2173

#### **Organism Descriptions**

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.							
Polythrincium	Habitat:	Found in soil and occasionally on plants.							
	Effects:	No known health effects. Allergenic properties are poorly studied.							



	Pleasant Tech Pleasant Date Address Address Address	Victoria 7 8/17/2021	Sample Type (mail Plant) End Time
A	the Bate. Surpling Turne	833	Planty End Time
14 14 0828 14 140		575	856
1A 4315272 JA 147		30×	9/10
H 4315269 JA hallway 147		931	938
A 43 5278 JA (45-164)		25.6	>
JA		1003	1010
		143	950
JA		1035	2101
1A 4315275 1A 222		1016	1023
JAh		729	1004
4315288 JA		8 001	1015
		1020	1027
1 H 4315277 JA CURKGIAC		1054	1101

Appendix B: Radon Analytical Results

Analysis Note: Result:  $1.2 \pm 0.3$  pCi/l Kit #: 9723712 Analyzed: 2021-08-25 at 10:00 am Location: 157 ROOM Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm Ja Hours/MST%: 101 hours 13.8% 70°F Kit #: 9723713 Result:  $0.9 \pm 0.3$  pCi/l Analysis Note: Analyzed: 2021-08-25 at 10:00 am Location: Cafe terica Started: 2021-08-19 at 10:00 am Ja Ended: 2021-08-23 at 3:00 pm Hours/MST%: 101 hours 16.7% 70°F Result:  $2.2 \pm 0.3$  pCi/l Analysis Note: Kit #: 9723705 Location: 164 Room Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm Ja Hours/MST%: 101 hours 13.4% 70°F Kit #: 9723706 Result:  $0.9 \pm 0.3$  pCi/l Analysis Note: Location: 105 Analyzed: 2021-08-25 at 10:00 am 200m Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm Ja

Air Chek 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

Hours/MST%: 101 hours 14.8% 70°F

#### Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723805

Result:  $0.9 \pm 0.3$  pCi/l

Location:

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 101 hours 17.6% 70°F

Kit #: 9723807

Result:  $1.2 \pm 0.3$  pCi/l

Location:

Ja

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 101 hours 14.5% 70°F

Kit #: 9723808

Result:  $1.4 \pm 0.3$  pCi/l

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 9:00 am

Ended: 2021-08-23 at 3:00 pm Hours/MST%: 102 hours 17.2% 70°F

Location:

Kit #: 9723809

Result:  $1.6 \pm 0.3$  pCi/I

Location:

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 11:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 18.9% 70°F

Kit #: 9723811 Result: < 0.3 pCi/I

Location:

Ja

GymB

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 9:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 102 hours 6.1% 70°F

Kit #: 9723812 Result:  $0.8 \pm 0.3$  pCi/l

Location:

Ja

afe Z

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 10:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 101 hours 16.7% 70°F

August 25, 2021

#### \*\* LABORATORY ANALYSIS REPORT \*\*

Pg 2 of 5

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723813 Result:  $1.2 \pm 0.3$  pCi/l

Location:

Ja

hall 149 courtyard

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 10:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 101 hours 13.0% 70°F

Kit #: 9723814

Result:  $1.1 \pm 0.3$  pCi/l

Location:

Ja

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 9:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 102 hours 14.3% 70°F

Kit #: 9723815 Result:  $0.8 \pm 0.3$  pCi/l

Location:

Ja

media center 1

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 11:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 12.9% 70°F

Kit #: 9723818

Result: < 0.3 pCi/l

Location:

Ja

207

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 11:00 am Ended: 2021-08-23 at 3:00 pm Hours/MST%: 100 hours 20.0% 70°F

Kit #: 9723819

Location:

Ja

Result:  $1.0 \pm 0.3$  pCi/l

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 9:00 am Ended: 2021-08-23 at 3:00 pm Hours/MST%: 102 hours 16.1% 70°F

Kit #: 9723820 Result: 0.8 ± 0.3 pCi/I

Location:

Ja

media center Z

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am Started: 2021-08-19 at 11:00 am Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 12.8% 70°F

August 25, 2021

#### \*\* LABORATORY ANALYSIS REPORT \*\*

Pg 3 of 5

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723821

Result:  $0.9 \pm 0.3$  pCi/l

Location:

t\_ Location.

Ja |\\

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am

Started: 2021-08-19 at 10:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 101 hours 12.9% 70°F

Kit #: 9723822

Result:  $1.1 \pm 0.3$  pCi/l

Location:

Ja

Sym2

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am

Started: 2021-08-19 at 9:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 102 hours 15.5% 70°F

Kit #: 9723825

Result:  $0.7 \pm 0.3$  pCi/l

Location:

Ja

Hall 214

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am

Started: 2021-08-19 at 11:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 14.1% 70°F

Kit #: 9723826

Result:  $0.7 \pm 0.3$  pCi/l

Location:

Ja

222 D

Analysis Note:

Analyzed: 2021-08-25 at 10:00 am

Started: 2021-08-19 at 11:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 17.6% 70°F

Kit #: 9723828

Result: ????

Location:

Ja 222

Analysis Note: WI

Analyzed: 2021-08-25 at 10:00 am

Started: 2021-08-19 at 11:00 am

Ended: 2021-08-23 at 3:00 pm

Hours/MST%: 100 hours 22.3% 70°F

Kit #: 9723846

Result: ????

Location:

Analysis Note: MI

Analyzed: 2021-08-25 at 10:00 am

Started: 0000-00-00 at

Ended: 0000-00-00 at

Hours/MST%: 0 hours 5.2% 70°F

John
Adam S
Elementury
Schoo

433		2 2 2 2	355	1:30	3:11	
TA CYMIN	-	~ ~	2	9:37	3:05	
3A 116	~	4	2	001.6	3.70	
JA109	-4		2	10.00	00 in	
JA LODES	-< 4	-e:-	> 2	10:07	3:00	
JA 164		۲.	ح	10.21	3:22	
TACATO BETOM -1	4	~	Z	10:35	3:25	
JACARtocium-2	4		5	10:35	30.20	
JAHan149 -contract	< 4	-	> >	200	21.50	
JA IT	-<-	45	2	10:40	21.12	
SA media Center-1	~	-C	۲	10:55	2 HD	
SA Medi UCEMPOR -2	:	·~	2	10:55	2:40	
	<b>C</b>	2 -	2	200	2	
1	4	7	2	a: 10	3:43	
JA2220	~	-0	>	<u>0</u>	2 h : 2	
	\$14 JA GYM -1 \$19 D JA GYM D \$818 JA GYM D \$808 JA GYM D \$800 JA GYM D \$800 JA 116 3706 JA 106 3706 JA 106 3712 JA 106 3714 JA CAFE TOT: UM -1 5812 JA CAFE TOT: UM -2 5813 JA 147 3805 JA 140 3815 JA Medi Ulenter -1 5820 JA 202 818 JA 202 5828 JA 222 5826 JA 222 5826 JA 222 5826 JA 222 5826 JA 222	JA G YM - 1  JA G YM D  JA G YM D  JA G YM D  JA 1064  JA 1064  JA 1064  JA 167  JA CAFE TOT UM - 1  JA CAFE TOT UM - 2  JA CAFE TOT UM - 2  JA MEDIA CENTEU - 2  JA 222  JA 2	TA G YM - 1  SA G YM D  TA G YM D  TA G YM D  TA 125  TA 109  TA 164  TA 167  TA 202  TA 222  TA 222			

Appendix C: VOCs (TO+15) Analytical Results



#### **Certificate of Analysis**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082525

September 22, 2021

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

Reference: PSS Project No: 21082525

Project Name: ACPS IAQ Testing Project Location: John Adams ES

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)**21082525**. This report has been to report results in ug/m³, per client. This report version includes revised sample results. This report cancels and supersedes report version 1.000 dated September 9, 2021.

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.

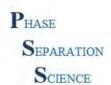
We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal

Laboratory Manager





### **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082525

### **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
21082525-001	JA-Gym	AIR	08/19/21 16:30
21082525-002	JA-140	AIR	08/19/21 16:34
21082525-003	JA-125	AIR	08/19/21 16:40
21082525-004	JA-116	AIR	08/19/21 16:45
21082525-005	JA-109	AIR	08/19/21 00:00
21082525-006	JA-157	AIR	08/19/21 16:51
21082525-007	JA-164	AIR	08/19/21 17:00
21082525-008	JA-Cafe	AIR	08/19/21 17:02
21082525-009	JA-Lobby	AIR	08/19/21 17:04
21082525-010	JA-147	AIR	08/19/21 17:08
21082525-011	JA-Library	AIR	08/19/21 17:16
21082525-012	JA-202	AIR	08/19/21 17:13
21082525-013	JA-Hall 213	AIR	08/19/21 17:19
21082525-014	JA-222	AIR	08/19/21 17:17
21082525-015	JA-Outdoor	AIR	08/19/21 17:23

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.



### **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082525

### 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.
- 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



Ms. Amber Confer Phase Separation Science, Inc. 6630 Baltimore National Pike Baltimore, MD 21228 September 22, 2021

**Account# 15354** 

Login# L545196

**Dear Amber Confer:** 

Enclosed are the revised 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

Lisa Luab

**Enclosure(s)** 



Account : 15354 Login No. :L545196

### COMMENT ANNEX

Please note that this revision cancels and supersedes L545196 (report reference:1) dated September  $22^{nd}$ , 2021 issued by SGS Galson.

Per your request, the reporting units were updated to ug/m<sup>3</sup>.



### ANALYTICAL REPORT

Account : 15354 Login No. : L545196

### **Terms and Conditions & General Disclaimers**

- This document is issued by the Company under its General Conditions of Service accessible at <a href="http://www.sgs.com/en/Terms-and-conditions.aspx">http://www.sgs.com/en/Terms-and-conditions.aspx</a>. 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 <a href="https://www.sgsgalson.com">www.sgsgalson.com</a>.
- 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.

Accreditation/Recognition

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 <a href="http://www.sgsgalson.com">http://www.sgsgalson.com</a> 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.

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	Lab ID: 1042	Mold Analysis Laboratory license
	Regulation		

Lab ID#

### Legend

National/International

< - Less than MDL - Method Detection Limit ppb - Parts per Billion mg - Milligrams > - Greater than ug - Micrograms NA - Not Applicable ppm - Parts per Million I - 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 ng - Nanograms in2 - Square Inches

Program/Sector



### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L54519

LABORATORY ANALYSIS REPORT

6601 Kirkville Road Site : NS Login No. : L545196 East Syracuse, NY 13057 Project No. : CITY OF ALEXANDRIA

(315) 432-5227 Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

FAX: (315) 437-0571 Date Received : 27-AUG-21 Report ID : 1263530

### TO15 List

www.sgsgalson.com

Galson ID: Client ID:		L545196- JA-GYM		-1 L545196-2 JA-140		2 L545196-3 JA-125		i-3
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6	<5.0	<8.6	<5.0	<8.6
Freon-12	0.80	4.0	<0.80	<4.0	<0.80	<4.0	<0.80	<4.0
Chloromethane	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Freon-114	0.80	5.6	<0.80	<5.6	<0.80	<5.6	<0.80	<5.6
Vinyl Chloride	0.80	2.0	<0.80	<2.0	<0.80	<2.0	<0.80	<2.0
1,3-Butadiene	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
n-Butane	0.80	1.9	0.80	2.0	1.6	3.9	1.0	2.3
Bromomethane	0.80	3.1	<0.80	<3.1	<0.80	<3.1	<0.80	<3.1
Chloroethane	0.80	2.1	<0.80	<2.1	<0.80	<2.1	<0.80	<2.1
Acetonitrile	5.0	8.4	<5.0	<8.4	<5.0	<8.4	<5.0	<8.4
Vinyl Bromide	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Acrolein	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
Acetone	5.0	12	12	28	27	64	15	35

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can

Submitted by : BLD

Date : 22-SEP-21



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

# GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196-1 JA-GYM		L545196-2 JA-140		L545196-3 JA-125	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Freon-11	0.80	4.5	<0.80	<4.5	<0.80	<4.5	<0.80	<4.5
Isopropyl Alcohol	5.0	12	<5.0	<12	7.7	19	6.2	15
Acrylonitrile	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Pentane	0.80	2.4	9.9	29	40	120	13	37
Ethyl Bromide	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
l,1-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
tert-Butyl Alcohol	5.0	15	<5.0	<15	<5.0	<15	<5.0	<15
Methylene Chloride	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Freon-113	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Carbon Disulfide	5.0	16	<5.0	<16	<5.0	<16	<5.0	<16
Allyl Chloride	0.80	2.5	<0.80	<2.5	<0.80	<2.5	<0.80	<2.5
rans-1,2-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
l,1-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-GYM	L545196-1 JA-GYM		L545196-2 JA-140		-3
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Methyl tert-Butyl Ether	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Jinyl Acetate	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Methyl Ethyl Ketone	0.80	2.4	0.80	2.4	1.6	4.8	1.5	4.3
cis-1,2-Dichloroethylene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
łexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Ethyl Acetate	0.80	2.9	1.5	5.3	0.90	3.2	1.1	3.9
Chloroform	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Tetrahydrofuran	0.80	2.4	<0.80	<2.4	<0.80	<2.4	<0.80	<2.4
l,2-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
l,1,1-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Benzene	0.80	2.6	<0.80	<2.6	<0.80	<2.6	<0.80	<2.6
Carbon Tetrachloride	0.80	5.0	<0.80	<5.0	<0.80	<5.0	<0.80	<5.0
Cyclohexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

# GALSON

LELAP Lab ID #04083

LABORATORY ANALYSIS REPORT

Client : Phase Separation Science, Inc. Account No.: 15354 6601 Kirkville Road Site

> Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Login No. : L545196

Date Received : 27-AUG-21 Report ID : 1263530

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-GYM	L545196-1 JA-GYM		L545196-2 JA-140		-3
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
,2-Dichloropropane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Bromodichloromethane	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
.,4-Dioxane	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Crichloroethylene	0.80	4.3	<0.80	<4.3	<0.80	<4.3	<0.80	<4.3
2,2,4-Trimethylpentane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Methyl Methacrylate	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
leptane	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
cis-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
rans-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
,1,2-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
ethyl Isobutyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
oluene	0.80	3.0	1.1	4.1	2.6	9.7	1.5	5.8
Methyl Butyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21

Page 10 of 47

Version 1.001



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-GYM	-1	L545196-2 JA-140		L545196-3 JA-125	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Dibromochloromethane	0.80	6.8	<0.80	<6.8	<0.80	<6.8	<0.80	<6.8
1,2-Dibromoethane	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Tetrachloroethylene	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
Chlorobenzene	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Ethylbenzene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
m & p-Xylene	1.6	6.9	<1.6	<6.9	<1.6	<6.9	<1.6	<6.9
Bromoform	0.80	8.3	<0.80	<8.3	<0.80	<8.3	<0.80	<8.3
Styrene	0.80	3.4	<0.80	<3.4	<0.80	<3.4	<0.80	<3.4
1,1,2,2-Tetrachloroethane	0.80	5.5	<0.80	<5.5	<0.80	<5.5	<0.80	<5.5
o-Xylene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Nonane	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2
Cumene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
2-Chlorotoluene	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354 Site Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-GYM	-1	L545196-2 JA-140		L545196 JA-125	-3
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
n-Propylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
4-Ethyltoluene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,3,5-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,2,4-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Benzyl Chloride	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1
1,3-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,4-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,2-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
Naphthalene	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can Approved by : BLD Submitted by

: BLD Date : 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-4 JA-116		L545196-5 JA-109		L545196-6 JA-157	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6	<6.0	<10	<5.0	<8.6
reon-12	0.80	4.0	<0.80	<4.0	<1.0	<4.7	1.3	6.3
Chloromethane	0.80	1.7	0.90	1.8	<1.0	<2.0	1.4	2.9
Freon-114	0.80	5.6	<0.80	<5.6	<1.0	<6.7	0.80	5.9
Jinyl Chloride	0.80	2.0	<0.80	<2.0	<1.0	<2.5	0.90	2.2
1,3-Butadiene	0.80	1.8	<0.80	<1.8	<1.0	<2.1	0.90	2.1
n-Butane	0.80	1.9	0.90	2.1	2.0	4.8	6.1	15
Bromomethane	0.80	3.1	<0.80	<3.1	<1.0	<3.7	1.0	3.9
Chloroethane	0.80	2.1	<0.80	<2.1	<1.0	<2.5	<0.80	<2.1
Acetonitrile	5.0	8.4	<5.0	<8.4	<6.0	<10	<5.0	<8.4
Jinyl Bromide	0.80	3.5	<0.80	<3.5	<1.0	<4.2	0.90	3.8
acrolein	0.80	1.8	<0.80	<1.8	<1.0	<2.2	1.1	2.6
cetone	5.0	12	9.0	21	11	27	43	100

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media: Mini Can

Approved by: BLD

Submitted by: BLD

Date: 22-

Supervisor: BLD

: 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571

www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196 JA-116	-4	L545196 JA-109	L545196-5 JA-109		-6
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Freon-11	0.80	4.5	<0.80	<4.5	<1.0	<5.4	1.0	5.9
Isopropyl Alcohol	5.0	12	7.1	18	<6.0	<15	<5.0	<12
Acrylonitrile	0.80	1.7	<0.80	<1.7	<1.0	<2.1	0.80	1.8
Pentane	0.80	2.4	1.8	5.5	2.3	6.9	3.1	9.2
Ethyl Bromide	0.80	3.6	<0.80	<3.6	<1.0	<4.3	<0.80	<3.6
l,1-Dichloroethene	0.80	3.2	<0.80	<3.2	<1.0	<3.8	0.80	3.3
tert-Butyl Alcohol	5.0	15	<5.0	<15	<6.0	<18	<5.0	<15
Methylene Chloride	0.80	2.8	<0.80	<2.8	<1.0	<3.3	1.0	3.6
Freon-113	0.80	6.1	<0.80	<6.1	<1.0	<7.4	0.90	7.1
Carbon Disulfide	5.0	16	<5.0	<16	<6.0	<19	<5.0	<16
Allyl Chloride	0.80	2.5	<0.80	<2.5	<1.0	<3.0	0.80	2.5
rans-1,2-Dichloroethene	0.80	3.2	<0.80	<3.2	<1.0	<3.8	0.80	3.3
l,1-Dichloroethane	0.80	3.2	<0.80	<3.2	<1.0	<3.9	0.80	3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-116	-4	L545196-5 JA-109		L545196 JA-157	-6
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Methyl tert-Butyl Ether	0.80	2.9	<0.80	<2.9	<1.0	<3.5	0.80	3.0
Vinyl Acetate	0.80	2.8	<0.80	<2.8	<1.0	<3.4	1.6	5.8
Methyl Ethyl Ketone	0.80	2.4	1.1	3.3	2.7	8.0	2.3	6.8
cis-1,2-Dichloroethylene	0.80	3.2	<0.80	<3.2	<1.0	<3.8	0.80	3.3
Hexane	0.80	2.8	<0.80	<2.8	<1.0	<3.4	0.90	3.0
Ethyl Acetate	0.80	2.9	0.90	3.4	1.0	3.8	2.6	9.4
Chloroform	0.80	3.9	<0.80	<3.9	<1.0	<4.7	0.90	4.4
Tetrahydrofuran	0.80	2.4	<0.80	<2.4	<1.0	<2.8	0.90	2.7
1,2-Dichloroethane	0.80	3.2	<0.80	<3.2	<1.0	<3.9	0.90	3.5
1,1,1-Trichloroethane	0.80	4.4	<0.80	<4.4	<1.0	<5.2	0.90	4.9
Benzene	0.80	2.6	<0.80	<2.6	<1.0	<3.1	0.90	2.9
Carbon Tetrachloride	0.80	5.0	<0.80	<5.0	<1.0	<6.0	0.90	5.6
Cyclohexane	0.80	2.8	<0.80	<2.8	<1.0	<3.3	1.0	3.5

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Site : NS
Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-4 JA-116		L545196-5 JA-109		L545196-6 JA-157	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
,2-Dichloropropane	0.80	3.7	<0.80	<3.7	<1.0	<4.4	0.90	4.2
romodichloromethane	0.80	5.4	<0.80	<5.4	<1.0	<6.4	0.90	5.8
,4-Dioxane	0.80	2.9	<0.80	<2.9	<1.0	<3.5	<0.80	<2.9
richloroethylene	0.80	4.3	<0.80	<4.3	<1.0	<5.2	0.80	4.5
,2,4-Trimethylpentane	0.80	3.7	<0.80	<3.7	<1.0	<4.5	<0.80	<3.7
ethyl Methacrylate	0.80	3.3	<0.80	<3.3	<1.0	<3.9	<0.80	<3.3
leptane	0.80	3.3	<0.80	<3.3	<1.0	<3.9	1.0	3.9
is-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<1.0	<4.4	<0.80	<3.6
rans-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<1.0	<4.4	<0.80	<3.6
,1,2-Trichloroethane	0.80	4.4	<0.80	<4.4	<1.0	<5.2	<0.80	<4.4
ethyl Isobutyl Ketone	0.80	3.3	<0.80	<3.3	<1.0	<3.9	1.0	3.9
oluene	0.80	3.0	1.6	6.1	1.1	4.2	1.8	6.7
ethyl Butyl Ketone	0.80	3.3	<0.80	<3.3	<1.0	<3.9	0.80	3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
6601 Kirkville Road Site : NS Login No. : L545196

East Syracuse, NY 13057 Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

FAX: (315) 437-0571

www.sgsgalson.com

Galson ID: Client ID:			L545196 JA-116	-4	L545196-5 JA-109		L545196-6 JA-157	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Dibromochloromethane	0.80	6.8	<0.80	<6.8	<1.0	<8.2	<0.80	<6.8
1,2-Dibromoethane	0.80	6.1	<0.80	<6.1	<1.0	<7.4	<0.80	<6.1
Tetrachloroethylene	0.80	5.4	<0.80	<5.4	<1.0	<6.5	0.80	5.6
Chlorobenzene	0.80	3.7	<0.80	<3.7	<1.0	<4.4	<0.80	<3.7
Ethylbenzene	0.80	3.5	<0.80	<3.5	<1.0	<4.2	0.80	3.5
m & p-Xylene	1.6	6.9	<1.6	<6.9	<1.9	<8.3	1.7	7.2
Bromoform	0.80	8.3	<0.80	<8.3	<1.0	<9.9	<0.80	<8.3
Styrene	0.80	3.4	<0.80	<3.4	<1.0	<4.1	0.80	3.4
1,1,2,2-Tetrachloroethane	0.80	5.5	<0.80	<5.5	<1.0	<6.6	<0.80	<5.5
o-Xylene	0.80	3.5	<0.80	<3.5	<1.0	<4.2	0.90	3.7
Nonane	0.80	4.2	<0.80	<4.2	<1.0	<5.0	<0.80	<4.2
Cumene	0.80	3.9	<0.80	<3.9	<1.0	<4.7	<0.80	<3.9
2-Chlorotoluene	0.80	4.1	<0.80	<4.1	<1.0	<5.0	<0.80	<4.1

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354 Login No. : L545196 Site

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196-4 JA-116		L545196-5 JA-109		L545196-6 JA-157	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
n-Propylbenzene	0.80	3.9	<0.80	<3.9	<1.0	<4.7	<0.80	<3.9
4-Ethyltoluene	0.80	3.9	<0.80	<3.9	<1.0	<4.7	<0.80	<3.9
1,3,5-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<1.0	<4.7	<0.80	<3.9
1,2,4-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<1.0	<4.7	0.80	4.0
Benzyl Chloride	0.80	4.1	<0.80	<4.1	<1.0	<5.0	<0.80	<4.1
1,3-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<1.0	<5.8	<0.80	<4.8
1,4-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<1.0	<5.8	<0.80	<4.8
1,2-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<1.0	<5.8	<0.80	<4.8
Naphthalene	0.80	4.2	<0.80	<4.2	<1.0	<5.0	<0.80	<4.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can Approved by : BLD Submitted by : 22-SEP-21

: BLD Date



### LELAP Lab ID #04083

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-7 JA-164		L545196-8 JA-CAFE		L545196-9 JA-LOBBY	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6	<5.0	<8.6	<5.0	<8.6
Freon-12	0.80	4.0	<0.80	<4.0	<0.80	<4.0	<0.80	<4.0
Chloromethane	0.80	1.7	<0.80	<1.7	0.90	2.0	<0.80	<1.7
Freon-114	0.80	5.6	<0.80	<5.6	<0.80	<5.6	<0.80	<5.6
Vinyl Chloride	0.80	2.0	<0.80	<2.0	<0.80	<2.0	<0.80	<2.0
1,3-Butadiene	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
n-Butane	0.80	1.9	3.1	7.4	1.7	4.0	1.4	3.2
Bromomethane	0.80	3.1	<0.80	<3.1	<0.80	<3.1	<0.80	<3.1
Chloroethane	0.80	2.1	<0.80	<2.1	<0.80	<2.1	<0.80	<2.1
Acetonitrile	5.0	8.4	<5.0	<8.4	<5.0	<8.4	<5.0	<8.4
Vinyl Bromide	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Acrolein	0.80	1.8	<0.80	<1.8	0.90	2.0	<0.80	<1.8
Acetone	5.0	12	39	93	26	62	19	45

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571

www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-7 JA-164		L545196-8 JA-CAFE		L545196-9 JA-LOBBY	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Freon-11	0.80	4.5	<0.80	<4.5	<0.80	<4.5	<0.80	<4.5
Isopropyl Alcohol	5.0	12	5.8	14	<5.0	<12	13	31
Acrylonitrile	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Pentane	0.80	2.4	83	250	15	46	2.1	6.2
Ethyl Bromide	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
1,1-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
tert-Butyl Alcohol	5.0	15	<5.0	<15	<5.0	<15	<5.0	<15
Methylene Chloride	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Freon-113	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Carbon Disulfide	5.0	16	<5.0	<16	<5.0	<16	<5.0	<16
Allyl Chloride	0.80	2.5	<0.80	<2.5	<0.80	<2.5	<0.80	<2.5
trans-1,2-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
1,1-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21

Page 20 of 47



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-7 JA-164		L545196-8 JA-CAFE		L545196-9 JA-LOBBY	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Methyl tert-Butyl Ether	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Vinyl Acetate	0.80	2.8	1.0	3.5	1.4	4.8	<0.80	<2.8
Methyl Ethyl Ketone	0.80	2.4	4.2	12	2.0	5.9	1.5	4.5
cis-1,2-Dichloroethylene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
łexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Ethyl Acetate	0.80	2.9	2.4	8.6	1.2	4.1	<0.80	<2.9
Chloroform	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Tetrahydrofuran	0.80	2.4	<0.80	<2.4	<0.80	<2.4	<0.80	<2.4
l,2-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
l,1,1-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Benzene	0.80	2.6	<0.80	<2.6	<0.80	<2.6	<0.80	<2.6
Carbon Tetrachloride	0.80	5.0	<0.80	<5.0	<0.80	<5.0	<0.80	<5.0
Cyclohexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

Date Analyzed : 08-SEP-21 - 09-SEP-21

Client 6601 Kirkville Road Site

East Syracuse, NY 13057 Project No. : CITY OF ALM (315) 432-5227 Date Sampled : 19-AUG-21

FAX: (315) 437-0571 www.sgsgalson.com

Site : NS Login No. : L545196 Project No. : CITY OF ALEXANDRIA

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

: Phase Separation Science, Inc. Account No.: 15354

### TO15 List

Galson ID: Client ID:			L545196 JA-164	-7	L545196-8 JA-CAFE		L545196-9 JA-LOBBY	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
1,2-Dichloropropane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Bromodichloromethane	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
1,4-Dioxane	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Trichloroethylene	0.80	4.3	<0.80	<4.3	<0.80	<4.3	<0.80	<4.3
2,2,4-Trimethylpentane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Methyl Methacrylate	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
Heptane	0.80	3.3	<0.80	<3.3	1.5	6.0	<0.80	<3.3
cis-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
trans-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
1,1,2-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Methyl Isobutyl Ketone	0.80	3.3	<0.80	<3.3	3.2	13	<0.80	<3.3
Toluene	0.80	3.0	5.0	19	11	42	1.7	6.3
Methyl Butyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196-7 JA-164		L545196-8 JA-CAFE		L545196-9 JA-LOBBY	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Dibromochloromethane	0.80	6.8	<0.80	<6.8	<0.80	<6.8	<0.80	<6.8
l,2-Dibromoethane	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Tetrachloroethylene	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
Chlorobenzene	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Ethylbenzene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
n & p-Xylene	1.6	6.9	<1.6	<6.9	<1.6	<6.9	<1.6	<6.9
Bromoform	0.80	8.3	<0.80	<8.3	<0.80	<8.3	<0.80	<8.3
Styrene	0.80	3.4	<0.80	<3.4	<0.80	<3.4	<0.80	<3.4
1,1,2,2-Tetrachloroethane	0.80	5.5	<0.80	<5.5	<0.80	<5.5	<0.80	<5.5
o-Xylene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Nonane	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2
Cumene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
2-Chlorotoluene	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
6601 Kirkville Road Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-164	-7		L545196-8 JA-CAFE		5-9 3Y
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
n-Propylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
4-Ethyltoluene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,3,5-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,2,4-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Benzyl Chloride	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1
1,3-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,4-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,2-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
Naphthalene	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-147	L545196-10 JA-147		-11 ARY	L545196-12 JA-202	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6	<5.0	<8.6	<5.0	<8.6
Freon-12	0.80	4.0	<0.80	<4.0	<0.80	<4.0	<0.80	<4.0
Chloromethane	0.80	1.7	<0.80	<1.7	<0.80	<1.7	0.80	1.7
Freon-114	0.80	5.6	<0.80	<5.6	<0.80	<5.6	<0.80	<5.6
Vinyl Chloride	0.80	2.0	<0.80	<2.0	<0.80	<2.0	<0.80	<2.0
1,3-Butadiene	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
n-Butane	0.80	1.9	3.1	7.4	1.6	3.9	0.90	2.2
Bromomethane	0.80	3.1	<0.80	<3.1	<0.80	<3.1	<0.80	<3.1
Chloroethane	0.80	2.1	<0.80	<2.1	<0.80	<2.1	<0.80	<2.1
Acetonitrile	5.0	8.4	<5.0	<8.4	<5.0	<8.4	<5.0	<8.4
Vinyl Bromide	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Acrolein	0.80	1.8	1.3	3.0	<0.80	<1.8	<0.80	<1.8
Acetone	5.0	12	46	110	19	44	19	45

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD

Collection Media : Mini Can

Submitted by : BLD

Approved by : BLD

Date : 22-SEP-21



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-147	-10	L545196-11 JA-LIBRARY		L545196-12 JA-202	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Freon-11	0.80	4.5	<0.80	<4.5	<0.80	<4.5	<0.80	<4.5
Isopropyl Alcohol	5.0	12	8.2	20	<5.0	<12	5.2	13
Acrylonitrile	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Pentane	0.80	2.4	34	99	14	42	11	33
Ethyl Bromide	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
1,1-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
tert-Butyl Alcohol	5.0	15	<5.0	<15	<5.0	<15	<5.0	<15
Methylene Chloride	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Freon-113	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Carbon Disulfide	5.0	16	<5.0	<16	<5.0	<16	<5.0	<16
Allyl Chloride	0.80	2.5	<0.80	<2.5	<0.80	<2.5	<0.80	<2.5
trans-1,2-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
1,1-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196 JA-147	-10	L545196-11 JA-LIBRARY		L545196-12 JA-202	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Methyl tert-Butyl Ether	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Vinyl Acetate	0.80	2.8	0.90	3.0	1.2	4.2	2.0	7.1
Methyl Ethyl Ketone	0.80	2.4	1.8	5.3	1.7	5.0	1.2	3.6
cis-1,2-Dichloroethylene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
Hexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Ethyl Acetate	0.80	2.9	0.90	3.3	1.0	3.4	1.8	6.5
Chloroform	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Tetrahydrofuran	0.80	2.4	<0.80	<2.4	<0.80	<2.4	<0.80	<2.4
1,2-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
1,1,1-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Benzene	0.80	2.6	<0.80	<2.6	<0.80	<2.6	<0.80	<2.6
Carbon Tetrachloride	0.80	5.0	<0.80	<5.0	<0.80	<5.0	<0.80	<5.0
Cyclohexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	1.1	3.8

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196 JA-147	-10	L545196-11 JA-LIBRARY		L545196-12 JA-202	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
,2-Dichloropropane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Bromodichloromethane	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
.,4-Dioxane	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Trichloroethylene	0.80	4.3	<0.80	<4.3	<0.80	<4.3	<0.80	<4.3
2,2,4-Trimethylpentane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Methyl Methacrylate	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
leptane	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
cis-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
rans-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
,1,2-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
ethyl Isobutyl Ketone	0.80	3.3	5.5	22	<0.80	<3.3	<0.80	<3.3
oluene	0.80	3.0	3.5	13	1.6	6.0	3.1	12
ethyl Butyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road Site

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196 JA-147	-10	0 L545196-11 JA-LIBRARY			
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Dibromochloromethane	0.80	6.8	<0.80	<6.8	<0.80	<6.8	<0.80	<6.8
1,2-Dibromoethane	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Tetrachloroethylene	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
Chlorobenzene	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Ethylbenzene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
m & p-Xylene	1.6	6.9	<1.6	<6.9	<1.6	<6.9	<1.6	<6.9
Bromoform	0.80	8.3	<0.80	<8.3	<0.80	<8.3	<0.80	<8.3
Styrene	0.80	3.4	<0.80	<3.4	<0.80	<3.4	<0.80	<3.4
1,1,2,2-Tetrachloroethane	0.80	5.5	<0.80	<5.5	<0.80	<5.5	<0.80	<5.5
o-Xylene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Nonane	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2
Cumene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
2-Chlorotoluene	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD Date : 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-10 JA-147		L545196-11 JA-LIBRARY		L545196-12 JA-202	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
n-Propylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
4-Ethyltoluene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,3,5-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,2,4-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Benzyl Chloride	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1
1,3-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,4-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,2-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
Naphthalene	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can

Approved by : BLD Submitted by : BLD Date : 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

### TO15 List

Galson ID: Client ID:			L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6	<5.0	<8.6	<5.0	<8.6
Freon-12	0.80	4.0	<0.80	<4.0	<0.80	<4.0	<0.80	<4.0
Chloromethane	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Freon-114	0.80	5.6	<0.80	<5.6	<0.80	<5.6	<0.80	<5.6
Jinyl Chloride	0.80	2.0	<0.80	<2.0	<0.80	<2.0	<0.80	<2.0
l,3-Butadiene	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
n-Butane	0.80	1.9	1.0	2.4	<0.80	<1.9	0.90	2.2
Bromomethane	0.80	3.1	<0.80	<3.1	<0.80	<3.1	<0.80	<3.1
Chloroethane	0.80	2.1	<0.80	<2.1	<0.80	<2.1	<0.80	<2.1
Acetonitrile	5.0	8.4	<5.0	<8.4	<5.0	<8.4	<5.0	<8.4
Jinyl Bromide	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Acrolein	0.80	1.8	<0.80	<1.8	<0.80	<1.8	<0.80	<1.8
Acetone	5.0	12	13	31	13	30	14	34

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:		L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR		
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Freon-11	0.80	4.5	<0.80	<4.5	<0.80	<4.5	<0.80	<4.5
Isopropyl Alcohol	5.0	12	<5.0	<12	<5.0	<12	<5.0	<12
Acrylonitrile	0.80	1.7	<0.80	<1.7	<0.80	<1.7	<0.80	<1.7
Pentane	0.80	2.4	7.8	23	2.4	7.2	1.8	5.3
Ethyl Bromide	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
1,1-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
tert-Butyl Alcohol	5.0	15	<5.0	<15	<5.0	<15	<5.0	<15
Methylene Chloride	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Freon-113	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Carbon Disulfide	5.0	16	<5.0	<16	<5.0	<16	<5.0	<16
Allyl Chloride	0.80	2.5	<0.80	<2.5	<0.80	<2.5	<0.80	<2.5
trans-1,2-Dichloroethene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
1,1-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

### GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Methyl tert-Butyl Ether	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
Vinyl Acetate	0.80	2.8	1.0	3.7	0.90	3.2	1.2	4.2
Methyl Ethyl Ketone	0.80	2.4	0.90	2.8	1.0	3.0	1.3	3.7
cis-1,2-Dichloroethylene	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
Hexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8
Ethyl Acetate	0.80	2.9	<0.80	<2.9	<0.80	<2.9	2.3	8.2
Chloroform	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Tetrahydrofuran	0.80	2.4	<0.80	<2.4	<0.80	<2.4	<0.80	<2.4
1,2-Dichloroethane	0.80	3.2	<0.80	<3.2	<0.80	<3.2	<0.80	<3.2
1,1,1-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Benzene	0.80	2.6	<0.80	<2.6	<0.80	<2.6	<0.80	<2.6
Carbon Tetrachloride	0.80	5.0	<0.80	<5.0	<0.80	<5.0	<0.80	<5.0
Cyclohexane	0.80	2.8	<0.80	<2.8	<0.80	<2.8	<0.80	<2.8

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057

## GALSON

### LELAP Lab ID #04083

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

(315) 432-5227

Galson ID: Client ID:		L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR		
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
,2-Dichloropropane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Bromodichloromethane	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
.,4-Dioxane	0.80	2.9	<0.80	<2.9	<0.80	<2.9	<0.80	<2.9
richloroethylene	0.80	4.3	<0.80	<4.3	<0.80	<4.3	<0.80	<4.3
2,2,4-Trimethylpentane	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Methyl Methacrylate	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
leptane	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
is-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
rans-1,3-Dichloropropene	0.80	3.6	<0.80	<3.6	<0.80	<3.6	<0.80	<3.6
,1,2-Trichloroethane	0.80	4.4	<0.80	<4.4	<0.80	<4.4	<0.80	<4.4
Methyl Isobutyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3
Coluene	0.80	3.0	1.2	4.4	1.0	3.8	1.1	4.1
Methyl Butyl Ketone	0.80	3.3	<0.80	<3.3	<0.80	<3.3	<0.80	<3.3

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS Supervisor: BLD



### LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571

www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354
Site : NS Login No. : L545196

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

LABORATORY ANALYSIS REPORT

#### TO15 List

Galson ID: Client ID:			L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
Dibromochloromethane	0.80	6.8	<0.80	<6.8	<0.80	<6.8	<0.80	<6.8
1,2-Dibromoethane	0.80	6.1	<0.80	<6.1	<0.80	<6.1	<0.80	<6.1
Tetrachloroethylene	0.80	5.4	<0.80	<5.4	<0.80	<5.4	<0.80	<5.4
Chlorobenzene	0.80	3.7	<0.80	<3.7	<0.80	<3.7	<0.80	<3.7
Ethylbenzene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
m & p-Xylene	1.6	6.9	<1.6	<6.9	<1.6	<6.9	<1.6	<6.9
Bromoform	0.80	8.3	<0.80	<8.3	<0.80	<8.3	<0.80	<8.3
Styrene	0.80	3.4	<0.80	<3.4	<0.80	<3.4	<0.80	<3.4
1,1,2,2-Tetrachloroethane	0.80	5.5	<0.80	<5.5	<0.80	<5.5	<0.80	<5.5
o-Xylene	0.80	3.5	<0.80	<3.5	<0.80	<3.5	<0.80	<3.5
Nonane	0.80	4.2	1.5	8.0	<0.80	<4.2	<0.80	<4.2
Cumene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
2-Chlorotoluene	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD Submitted by : BLD Date : 22-SEP-21



East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

### GALSON

### LELAP Lab ID #04083

Client 6601 Kirkville Road Site

: Phase Separation Science, Inc. Account No.: 15354 Login No. : L545196

LABORATORY ANALYSIS REPORT

Project No. : CITY OF ALEXANDRIA

Date Sampled : 19-AUG-21 Date Analyzed : 08-SEP-21 - 09-SEP-21

Date Received : 27-AUG-21 Report ID : 1263530

### TO15 List

(315) 432-5227

Galson ID: Client ID:			L545196-13 JA-HALL 213		L545196-14 JA-222		L545196-15 JA-OUTDOOR	
	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3	ppbv	ug/m3	ppbv	ug/m3
n-Propylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
4-Ethyltoluene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,3,5-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
1,2,4-Trimethylbenzene	0.80	3.9	<0.80	<3.9	<0.80	<3.9	<0.80	<3.9
Benzyl Chloride	0.80	4.1	<0.80	<4.1	<0.80	<4.1	<0.80	<4.1
1,3-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,4-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
1,2-Dichlorobenzene	0.80	4.8	<0.80	<4.8	<0.80	<4.8	<0.80	<4.8
Naphthalene	0.80	4.2	<0.80	<4.2	<0.80	<4.2	<0.80	<4.2

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS

Collection Media : Mini Can Approved by : BLD

Submitted by : BLD Date : 22-SEP-21





Client Name : Phase Separation Science, Inc.

Site

Project No. : CITY OF ALEXANDRIA

Date Sampled: 19-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No.: L545196

Date Analyzed: 08-SEP-21 - 09-SEP-21

FAX: (315) 437-0571 www.sgsgalson.com

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

L545196 (Report ID: 1263530):

NYSDOH does not offer a certification for the following compounds:

Propylene, Ethyl Acetate, Tetrahydrofuran, Methyl n-Butyl Ketone, 4-Ethyl Toluene, n-Butane,

Pentane, Ethyl Bromide, Nonane, and n-Propylbenzene.

SOPs: in-vocs(40)

L545196-1-3,7,11-14 (Report ID: 1263530):

Sample canisters were received at/near ambient pressure.

L545196-4-5,9 (Report ID: 1263530):

Acetone results may be biased high due to co-elution with 2-methylbutane.

L545196-11-12,15 (Report ID: 1263530):

Vinyl Acetate results may be biased high due to co-elution with 2-methylpentane.

L545196 (Report ID: 1263530):

A bracketing continuing calibration verification standard (CCV) was outside the control limits of 70.0 to 130.%

at 64.8% recovery for Naphthalene.

L545196-5 (Report ID: 1263530):

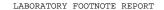
Elevated detection limits due to low sample volume injected. The sample injected at a volume less

than programmed for the autosampler. A dilution factor of 1.2x was applied to compensate for the lower volume.

L545196 (Report ID: 1263530):

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
1,1,2,2-Tetrachloroethane	+/-13.1%	102%
1,1,2-Trichloroethane	+/-10.9%	101%
1,1-Dichloroethane	+/-13.1%	99.7%
1,1-Dichloroethene	+/-13.5%	102%
1,2,4-Trimethylbenzene	+/-14.6%	108%
1,2-Dibromoethane	+/-12.9%	103%
1,2-Dichlorobenzene	+/-12.2%	105%
1,2-Dichloroethane	+/-14.9%	102%
1,2-Dichloropropane	+/-13.1%	99.7%
1,3,5-Trimethylbenzene	+/-13.1%	105%
1,3-Dichlorobenzene	+/-12.3%	104%
1,4-Dichlorobenzene	+/-13.6%	104%
2,2,4-Trimethylpentane	+/-13.9%	102%





6601 Kirkville Road East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

(315) 432-5227

## GALSON

Client Name : Phase Separation Science, Inc.

Site

Project No. : CITY OF ALEXANDRIA

Date Sampled: 19-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No.: L545196

Date Analyzed: 08-SEP-21 - 09-SEP-21

2-Chlorotoluene	+/-13.1%	105%
4-Ethyltoluene	+/-14%	106%
Acrolein	+/-17.1%	100%
Acrylonitrile	+/-16.9%	100%
Allyl Chloride	+/-16.4%	101%
Acetonitrile	+/-17.4%	100%
Acetone	+/-15.4%	102%
Bromodichloromethane	+/-11.3%	103%
Bromoform	+/-14.1%	107%
1,3-Butadiene	+/-17.1%	100%
n-Butane	+/-18.7%	98%
Benzene	+/-11.6%	100%
Benzyl Chloride	+/-15.6%	113%
Carbon Disulfide	+/-12.7%	99.7%
Carbon Tetrachloride	+/-13.4%	104%
cis-1,2-Dichloroethylene	+/-13.7%	101%
cis-1,3-Dichloropropene	+/-13.2%	104%
Chlorobenzene	+/-12.4%	100%
Dibromochloromethane	+/-12.9%	105%
Chloroform	+/-11.8%	100%
Cumene	+/-13.1%	104%
Cyclohexane	+/-14.5%	101%
1,4-Dioxane	+/-13.3%	104%
Ethyl Acetate	+/-16.2%	102%
Ethylbenzene	+/-14%	104%
Chloroethane	+/-19.3%	99.3%
Ethyl Bromide	+/-11.2%	100%
Freon-11	+/-16.7%	103%
Freon-113	+/-11.3%	99.9%
Freon-114	+/-14.3%	102%
Freon-12	+/-14.8%	104%
Heptane	+/-16.2%	102%
Isopropyl Alcohol	+/-15.4%	103%
1,1,1-Trichloroethane	+/-13.1%	103%
Bromomethane	+/-12.7%	99.2%
Chloromethane	+/-17.5%	98.6%
Methylene Chloride	+/-12.3%	97.6%
Methyl Ethyl Ketone	+/-15.9%	101%
Methyl Methacrylate	+/-15.2%	104%
Methyl Isobutyl Ketone	+/-18.1%	103%
Methyl Butyl Ketone	+/-18.8%	107%
m & p-Xylene	+/-13.2%	107%
Methyl tert-Butyl Ether	+/-14.6%	102%
Naphthalene	+/-14.0%	111%
Hexane	+/-20.2%	100%
пелане	+/-LJ.Z%	T004





6601 Kirkville Road East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

(315) 432-5227

## GALSON

Client Name : Phase Separation Science, Inc.

Site

Project No. : CITY OF ALEXANDRIA

Date Sampled: 19-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No.: L545196

Date Analyzed: 08-SEP-21 - 09-SEP-21

Nonane	+/-17.9%	104%
n-Propylbenzene	+/-12.6%	105%
o-Xylene	+/-13.2%	104%
Propylene	+/-16.8%	101%
Pentane	+/-18.7%	99.1%
Styrene	+/-14.8%	106%
Trichloroethylene	+/-11.1%	102%
tert-Butyl Alcohol	+/-16.4%	104%
Tetrachloroethylene	+/-12%	102%
Tetrahydrofuran	+/-18.7%	102%
Toluene	+/-14.3%	102%
trans-1,2-Dichloroethene	+/-13.8%	101%
trans-1,3-Dichloropropene	+/-13.7%	106%
Vinyl Acetate	+/-17.1%	102%
Vinyl Bromide	+/-14.5%	102%
Vinyl Chloride	+/-15.2%	100%

1223	13E40165461239 ::08/27/21		1545	196									
Ship Init	per:UPS ials:BGF UNKNOWN	V	New Client?	- Ea	nase Separ 330 Baltimo altimore, Ml	re Natio	nal Pike	Invoice 1	o* : <u>Phase S</u> 	Separati	on Scie	ence	
	East Syracuse, NY 1: Tel: (315) 432-5227 888-432-LABS (! www.sgsgalson.com	5227)	black cart E	Phone No.* : 41  Cell No. : mail Results to : An  Email address: re	mber Confe	r aseonlir		P.O. N Credit Ca	No.: 410-747-8 nail: invoicing@ No.: ard: Card on F	phaseor	Call for Cred	dit Card Ir	
	Need Results By: (surchar	ge)		<b>\</b>	Samples subr	mitted usin	g the FreePumpLoan™	Program Samples	submitted using t	ne ricesam	pingbadge	s riogia	1111
W	Standard 0%		Site Name :			Pro	ject: City of Alexar	ndria Sam	pled by :				
•	4 Business Days 35%		Comments :										
	3 Business Days 50%		Per cli	ent, TO15 list. KLD	8/27/21								
	2 Business Days 75%								Ta:	List OFL			
	Next Day by 6pm 100%		List description of indu	ustry or Process/interf	ferences preser	nt in sampl	ing area :	State samples were collected in (e.g., NY)	Please indicate	·		Cal (	
	Next Day by Noon 150%							VA	☐ MSHA	Other			
	Same Day 200%  Sample Identification* (Maxmium of 20 Characters)		Date Sampled	Collection Medium	Sample Sample Sample	Time	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requ	uested*	Method F	Reference^	Process (	ent Chromium (e.g., welding painting, etc.)
	JA-Gym		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-140		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-125		08/19/21	Canister	0.5L			VOC (indoor air)	<del> </del>	TO-15			
	JA-116		08/19/21	Canister	0.5L	<del></del>	-	VOC (indoor air)		TO-15			
	JA-109		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-157		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-164	$\neg \uparrow$	08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			_
	JA-Cafe		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-Lobby		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-147		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15			
	JA-Library		08/19/21	Canister	0.5L			VOC (indoor air)		TO-15		<u></u>	
	^Galson Laboratories will subsititu	te our	routine/preferred meth	od if it does not matc	ch the method	listed on th	e COC unless this box i	s checked: 🗸 Use method	(s) listed on COC				
	For metals analysis: if requesting a	n analy	te with the option of a	lower LOQ, please in	ndicate if the lo	wer LOQ is	required (only availabl	e for certain analytes - see S	AG):				,
	For crystalline silica: form(s) of sili	ca need	led must be indicated	Quartz, Cristobalite,	and/or Tridymi	ite)* :							
	Chain of Custody	Pri	nt Name/Signature		Date	Time			me/Signature	<del>,</del>	Da		Time
	Relinquished by:						Received by :	Brett Grenert-Fisc	her Bull L	runut -	Jischer		1126
	Relinquished by :						Received by :				812-	1/21	<u> </u>
			* R	Sample equ <b>Page</b> a7s,01ai181	es received a De to <b>Rocpo</b> nte	ifter 3pm i <b>Refese</b> l	will be considered a: <b>ୀଯ6ଃ</b> 2m <b>ନ୍ତାହୋଧୀନ</b> d	s next day's business 222s EPv221 s121148s b	eing processed.		F	<sup>2</sup> age_1_	of <u>2</u>

	cac	0.81.008	New Client	Report To* : Ph	ase Separation S	cience	Invoice T	∘*∶ <u>Phase S</u>	eparation	on Scie	ence	
		GALSON		Pat	30 Baltimore National States (National States)							
			Client Account	No.*:	millioro, Mio 21220							
	6601 Kir			—	747.0770		Phone N	lo : 440 747 0	770			
		acuse, NY 13057 5) 432-5227		Phone No.* : 41(				lo.: <u>410-747-8</u>				
		-432-LABS (5227)						ail: <u>invoicing@</u>		line.com		
	NAMA/NA CO	sgalson.com	t	Email Results to : Am				o.:				
	******.3g	3gu13011.00111		Email address: rep	orting@phaseonlii	ne.com	Credit Cai	rd : Card on F	ile C	Call for Cred	dit Card I	nfo.
	Need Results By:	(surcharge)		✓:	Samples submitted usin	ng the FreePumpLoan™	Program Samples s	submitted using th	ne FreeSamp	olingBadge	s™ Progra	am
Ø	Standa	rd 0%	Site Name :		Pro	oject: City of Alexa	ndria Samı	oled by :				
	4 Business Da	ys 35%	Comments:									
	3 Business Da	ys 50%										
	2 Business Da	ys 75%						<b>,</b>				
	Next Day by 6p	m 100%	List description of inc	lustry or Process/interfe	rences present in samp	ling area :	State samples were collected in (e.g., NY)	Please indicate v				
	Next Day by No	on 150%						OSHA PEL	_		Cal (	DSHA
	Same Da	y 200%				т.	VA	☐ MSHA	Other (s	specify):		
	Sample Ide (Maxmium of 2		Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Reque	ested*	Method Re	eference^	Process (	ent Chromium (e.g., welding painting, etc.)*
JA.	202		08/19/21	Canister	0.5L		VOC (indoor air)		TO-15			
JA	-Hall 213		08/19/21	Canister	0.5L		VOC (indoor air)		TO-15			
JA	-222		08/19/21	Canister	0.5L		VOC (indoor air)		TO-15			
JA	-Outdoor		08/19/21	Canister	0.5L		VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
							VOC (indoor air)		TO-15			
^6	ialson Laboratories	will subsititute our	routine/preferred met	hod if it does not match	the method listed on th	ne COC unless this box is	s checked: 🚺 Use method(s	s) listed on COC				
Fo	r metals analysis: i	f requesting an anal	yte with the option of	a lower LOQ, please ind	icate if the lower LOQ is	required (only availabl	e for certain analytes - see SA	G):				4
Fo	r crystalline silica:	form(s) of silica need	ded must be indicated	(Quartz, Cristobalite, ar	nd/or Tridymite)* :							
Ch	ain of Custody	Pri	nt Name/Signature		Date Time		Print Nam	e/Signature		Dat	e	Time
Re	inquished by :					Received by :	Brett Grenert-Fisch	er But D	uneit - 1	Sinchus		1126
Re	inquished by :			<u> </u>		Received by :				8/27	121	
			* F	•			s next day's business প্ৰশাসন্মান স্বিশ্বসাধিক bei	ng processed.		Р	age 2	of 2



## **Chain of Custody Form for Subcontracted Analyses**

Page 1 of 1

SGS North America - NY ms ES  6601 Kirkville Road East Syracuse, NY 13057  Old SGS Galson Labs. bsc Phone: 315-432-5227  Analyses Required  Method  Type of Container  or by GC/MS (subbed)  TO-15  Air Canister  NON
East Syracuse, NY 13057  Old SGS Galson Labs. bsc Phone: 315-432-5227  Analyses Required  Method  Type of Container  Preservat
Old SGS Galson Labs. bsc Phone: 315-432-5227  Analyses Required  Method  Type of Container  Preservat
Analyses Required Method Type of Container Preservat
Analyses Required Method Type of Preservat Container
Container
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
r by GC/MS (subbed) TO-15 Air Canister NON
i: i: i: i: i: i:



## **Case Narrative**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082525

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:**

Soil gas/indoor air not indicated on COC; samples are indoor air.

Incoming pressures not taken at lab upon receipt; samples subcontracted. Incoming pressures will be taken at subcontracted lab.

Stop dates not recorded on COC; flow controllers provided were for an 8 hour collection time. Sampling end date used is 8/19/21.

No stop time documented on COC for sample 005.

21082525: 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.

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

## 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

1)	6630	0 Baltimore	National Pil	(e ~ Suite 1	03-A ~ Balti	imore, Ma	ryland 2122	8 ~ (410	0) 747-8	3770 ~ (	800)	932-9	1047		
PSS	SCLIENT: TEC	OFFI	ICE LOCATION	Lordio	n	PSS Work		5		PAGE .	1	OF.	2	4	
BILL	L TO (if different):	РНО	NE#: (703	) 567 -	4346	2	10825	28 6	26/21						
CON	NTACT: Karl Ford	EMA	IL: Kford 6	Oteci.pr	0	3					ab	tAir			
PRO	DJECTNAME: ACPS LAQ F	esting	PROJECT#:	492000	12		Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure in field ("Hg) Stop	Canister ("Hg) Lab	Gas / Subslab	Indoor / Ambient Air	II List	st	
SITE	ELOCATION: John Adam	SES	P.O.#:			. 0	ple R	ister F ("Hg)	ister F ("Hg)	Incoming ( Pressure (	Gas/	or/A	TO-15 Full List	Special List	
SAM	MPLER(S):					Can ID	Sarr	Can	Can	Inco	Soil	Indo	5	Spe	REMARKS
2)PSS	S ID SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE STOP	Time Stop (24hr clock)	-									
-1	JA-Gym	8/19/20	830	E D	1630	03180	04453	30+	0						Demo floor
2	- JA-140	(/	834		1634	531	04587	30	0						
3	JA-125	10	840		1640	02574	10146	30+	-6.0	5.00					
U	1 JA-116	11	945		1645	9103	13813	30	10						
5	JA- 109	1'	847			681	11473	NA	NA						Gauge Groken
6	JA-157	Lr	851		1651	00334	-	304	2						0
7	JA-164	H	855		1700	679	04589	26	5						
8		el	857		1702	01761	WR 364	30	1.5						
9	JA-Lobby	10	701		1704	2335	1.00 0.44	30+							
1		16	905		1708	8334	13810	304	9					4	
11	linquished By: (1)	Date 8/25/21	Time 5:35	Received By:	lson	4	Reques 5-Day Next Day	sted TAT	(One TAT -Day mergend	per CO	C) 2-Day Other	1		oing Ca	arrier: IENT
Rel	linquished Byz(2)	Date /	Time	Received By:			Data Delivera	ables Red	quired:						
Rel	linquished By: (3)	Date	Time	Received By:			Special Instru	uctions:							4
Rel	linquished By: (4)	Date	Time	Received By:											

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.

## 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 CLI	ENT: FEC		CELOCATION		PSS Work	Order#:	bann	PAGE .	2	OF.						
		TNAME: ACPS 1AQ	EMAI	IL: Kford	Oteci. P	10	3	Order #: OS 75	Pressure in Start	Pressure in 3) Stop	Canister ("Hg) Lab	/ Subslab	ndoor / Ambient Air	ull List	List		
	SITE LO	cation: John Adam :r(s):	ns es	P.O.#:			Can ID	Sample	Canister field ("Hg	Canister field ("Hg	Incoming	Soil Gas	Indoor/	TO-15 Full List	Special List	REMARKS	
2	PSS ID	SAMPLE IDENTIFICATION	DATE START	Time Start (24hr clock)	DATE	Time Stop (24hr clock)										÷	
	11	JA-Library	8/19/21	910	,	PASITI	9108	10726	29	0	in i						
	12	JA-202	ll ll	915		1713	02624	04621	30	0					-		
	13	JA-Hall 213	II	918		1719	WA150			0	-						
	14	JA 222	((	920		1717		WR471		5,5							
	15	JA - Outdoor	11	930		1723 7	03483	07495	30	6.5			J = 1			,	
						10. 5	688										
							-07										
								-									_
(5	Le		Date 8/25/21	Time 5:35	Received By:	240	M	Reques 5-Day Next Day	sted TAT	(One TAT -Day Emergence	per CO	C) 2-Day Other		Shipp	ing Ca	rier: JENT	
	Relinqu	ished By: (2)	pate /	Time	Received By:		3	Data Delivera	ables Re	quired:							
	Relinqu	ished By: (3)	Date	Time	Received By:			Special Instru	uctions:							-	
	Relinqu	ished By: (4)	Date	Time	Received By:	. "										-	

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.



## **Sample Receipt Checklist**

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

Project Name: ACPS IAQ Testing PSS Project No.: 21082525

**Client Name** Total Environmental Concepts - Lorto Received By Betsy Colson

Date Received 08/25/2021 05:35:00 PM **Disposal Date** 09/29/2021

> Client **Delivered By**

> > Temp (deg C)

Not Applicable **Tracking No** 

Logged In By **Amber Confer** 

Shipping Container(s)

No. of Coolers

Custody Seal(s) Intact?

Ice N/A

Temp Blank Present No N/A

Seal(s) Signed / Dated?

Sampler Name Not Provided **Documentation** 

COC agrees with sample labels? Yes N/A

Chain of Custody Yes

Custody Seal(s) Intact? Not Applicable Sample Container

Appropriate for Specified Analysis? Yes Seal(s) Signed / Dated Not Applicable

N/A

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

## Phase Separation Science

## **Sample Receipt Checklist**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082525

Client Name Total Environmental Concepts - Lorto Received By Betsy Colson

**Delivered By** Client

Tracking No Not Applicable

Logged In By Amber Confer

## 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.

Soil gas/indoor air not indicated on COC; samples are indoor air.

Incoming pressures not taken at lab upon receipt; samples subcontracted. Incoming pressures will be taken at subcontracted lab.

Stop dates not recorded on COC; flow controllers provided were for an 8 hour collection time. Sampling end date used is 8/19/21.

No stop time documented on COC for sample 005.

Samples Inspected/Checklist Completed By:	Amber Confer	Date: 08/26/2021
PM Review and Approval:	NY Jackson  Lynn Jackson	Date: 08/26/2021

# SCIENCE ASE

All Fields must be completed accurately. www.phaseonline.com info@phaseonline.com Shaded sections for lab use only.

6630 **Baltimore National Pike** ~ Baltimore No Vana というの (410) 747

			5	1							FILES			3						F
Relinquished By: (4)	Relinquished By: (3)	Relinquished By: (2)	Relinquished By: (1)	TA-147	2 4 - Lobby	JA. Cafe	104·164	JA-157	77-105	3A-116	JA-125	JA-140	JA-GYM	PSS ID SAMPLE IDENTIFICATION	SAMPLER(S):	SITE LOCATION:	PROJECT NAME:	CONTACT:	BILL TO (if different):	PSS CLIENT:
Date	Date	Date	Date	11		ci		11		11	11	(1)	8/19/20	DATE				EMAI	PHON	OFFIC
Time	Time	Time	Time	905	701	957	855	8 51	847	945	340	834	023	Time Start (24hr clock)		P.O. #:	PROJECT#:		NE #:	E LOCATION:
Received By:	Received By:	Received By:	Received By:											DATE						
				1708	1704	1702	1700	1651		1645	1640	1634	1630	Time Stop (24hr clock)						
			4	4528	2335	134.10	54%	W 334	189	5103	02574	S 8	03180		Can	ID		3		PSS Work O
	Special Instru	Data Deliverabl	Request S-Day Next Day	13810	13806	WR 369	B4589	08440	11473	13813	90100	48240	04453		San	ple F	Reg. II			rder #:
	actions:	ables Requ	ted TAT (C	304	100	020	26	t 32	NAN	30	705	30	400				Press ) Star	ure in		
		uired:	Day nergency	9	10.5	is	3	2	A	0	6.0	0	(3)		field	("Hg	) Stop			P
			per coc												Pres	ssure	Canis ("Hg)	Lab		AGE
			-Day														/ Subs	nt Air		OF.
			Shippin												TO-	15 F	ull List			
			ing Carrier:									•			Spe	ecial L	ist			
			er						Sauge Oroken				Ens floor		REMARKS					

This chain of custody is a legal document. services per the latest version of the Services. of the Service The client (Client Name), by signing, Brochure or PSS-provided quotation 9 or having including client's agent sign, this "TO-15 any and all attorney's or other "TO-15 reasonable Chain 약 Custody Form", agrees to pay for the above refees if collection becomes necessary.

## SEPARATIO HASE SCIENCE

All Fields must be www.phaseonline.com complet ted accurately. info@phaseonline.com Shaded sections for lab use only.

			5	-	-	-							(2)			T			-	
Relinquished By: (4)	Relinquished By: (3)	d By:	By:					JA - Outdoor	34722	JA-1611 213	JA-202	JA-Library	PSS ID SAMPLE IDENTIFICATION	SAMPLER(S):	SITE LOCATION:	PROJECT NAME:	CONTACT:	BILL TO (if different):	PSS CLIENT:	
Date	Date	Date	Date					~	()			8/19/21	DATE				EMAI	PHON	OFFIC	Daininio.
Time	Time	Time	Time					930	920	918	915	710	Time Start (24hr clock)		P.O. #:	PROJECT#:		VE #:	ICE LOCATION:	ACCUMULATION OF THE PARTY OF TH
Received By:	Received By:	Received By:	Received By:										DATE							
							-	IN SECTION	1717	1719	1713	西地	Time Stop (24hr clock)							THE PARTY OF THE P
			4				688	SER	14020	OSIAM	D7624.	580700		Can	ID		(E)		PSS Work O	Particular for a constant
	Special Instru	Data Delivera	Reques					Softo	WK 471	80490	12940	10726		Sam	ple R	eg. ID			rder #:	Commission in commission in the commission of the commission in the commission of th
	actions:	erables Req	ted TAT					30	408	22	30	29				ressu	ure in			
		quired:	(One TAT 3-Day Emergency					65	5.5	0	0	0				Pressi	ure in			
			AT per C											Inco	ming	Canis ("Hg)	ter		PAGE _	10
			2-Day Other											Soil	Gas	Subs	slab			
																	nt Air		OF	
			Shipping													III List				
			Carri											Spe	cial L	ISL				1
			e											REMARKS						

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

Appendix D: Formaldehyde Analytical Results



## **Certificate of Analysis**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082539

September 3, 2021

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

Reference: PSS Project No: 21082539

Project Name: ACPS IAQ Testing Project Location: John Adams

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) 21082539.

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





## **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082539

## **Project ID: 4920002**

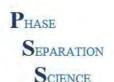
The following samples were received under chain of custody by Phase Separation Science (PSS) on 08/25/2021 at 05:35 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected	
21082539-001	JA-Cafeteria	AIR	08/19/21 00:00	
21082539-002	JA-Hall 149	AIR	08/19/21 00:00	
21082539-003	JA-Class 147	AIR	08/19/21 00:00	
21082539-004	JA-Class 140	AIR	08/19/21 00:00	
21082539-005	JA-Gym	AIR	08/19/21 00:00	
21082539-006	JA-Class 125	AIR	08/19/21 00:00	
21082539-007	JA-Class 116	AIR	08/19/21 00:00	
21082539-008	JA-Class 109	AIR	08/19/21 00:00	
21082539-009	JA-Lobby	AIR	08/19/21 00:00	
21082539-010	JA-157	AIR	08/19/21 00:00	
21082539-011	JA-Class 164	AIR	08/19/21 00:00	
21082539-012	JA-Library	AIR	08/19/21 00:00	
21082539-013	JA-Class 202	AIR	08/19/21 00:00	
21082539-014	JA-Hall 220	AIR	08/19/21 00:00	
21082539-015	JA-Class 222	AIR	08/19/21 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.



## **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082539

## 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.
- 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



Ms. Amber Confer Phase Separation Science, Inc. 6630 Baltimore National Pike Baltimore, MD 21228 September 02, 2021

Account# 15354 Login# L545217

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

Lisa Luab

Enclosure(s)



## ANALYTICAL REPORT

Account : 15354 Login No. : L545217

## **Terms and Conditions & General Disclaimers**

- This document is issued by the Company under its General Conditions of Service accessible at <a href="http://www.sgs.com/en/Terms-and-conditions.aspx">http://www.sgs.com/en/Terms-and-conditions.aspx</a>. 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 <a href="https://www.sgsgalson.com">www.sgsgalson.com</a>.
- 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.

Accreditation/Recognition

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 <a href="http://www.sgsgalson.com">http://www.sgsgalson.com</a> 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.

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	Lab ID: 1042	Mold Analysis Laboratory license
	Regulation		

Lab ID#

## Legend

National/International

< - Less than MDL - Method Detection Limit mg - Milligrams ppb - Parts per Billion > - Greater than ug - Micrograms NA - Not Applicable ppm - Parts per Million I - 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

Program/Sector



## LABORATORY ANALYSIS REPORT

## GALSON

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

: Phase Separation Science, Inc.

Site : JOHN ADAMS Project No. : ACPS IAQ TESTING-4920002

: 19-AUG-21

Date Received

Date Sampled

Date Analyzed : 30-AUG-21 - 31-AUG-21 Report ID : 1262672

Account No.: 15354 Login No. : L545217

: 27-AUG-21 Report ID : 126

0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 0.01 <0.01 <0.01 <0.01 <0.01 mdd mg/m3 Conc <0.01 0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 0.01 <0.01 <0.01 <0.01 <0.01 Total nd <0.4 <0.4 0.4 <0.4 <0.4 <0.4 minutes Time 255 246 240 259 240 230 252 251 243 248 244 253 250 L545217-10 L545217-14 L545217-15 L545217-11 L545217-12 L545217-13 L545217-6 L545217-8 L545217-9 L545217-3 L545217-4 L545217-5 L545217-7 L545217-1 L545217-2 Lab ID JA-CLASS 125 JA-CLASS 116 JA-CLASS 109 JA-CLASS 202 JA-CAFETERIA JA-CLASS 147 JA-CLASS 140 JA-CLASS 164 JA-CLASS 222 JA-HALL 220 JA-HALL 149 JA-LIBRARY Formaldehyde Sample ID JA-LOBBY JA-GYM JA-157

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

Approved by: MLN		
Submitted by: JLL	Date : 02-SEP-21	Supervisor : MWJ
on: 0.4 ug	: mod. OSHA 1007; HPLC/UV	: Assay 581
Level of Quantitation: 0.4 ug	Analytical Method	Collection Media

Page 6 of 14



LABORATORY FOOTNOTE REPORT

## GALSON

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

Login No. : L545217 Account No.: 15354 Client Name : Phase Separation Science, Inc. Site : JOHN ADAMS
Project No. : ACPS IAQ TESTING-4920002 Date Sampled : 19-AUG-21 Date Received: 27-AUG-21 Date Analyzed: 30-AUG-21 - 31-AUG-21

L545217 (Report ID: 1262672):

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)

ID: 1262672): L545217 (Report

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.

Mean Recovery Accuracy +/-12.1% Formaldehyde Parameter

Page 7 of 14

## 21082539

SES	GAISON	New Client?		Report To*: Phase Separation Science 6630 Baltimore National Pike	cience onal Pike	Invoice To* : Ph	Invoice To* : Phase Separation Science	cience
12	18	Vient Account No.*:	No.*: Baltin	timore, MD 21228				
Date: 08/27/21 Shipper: UPS			1					777
=			Phone No. * : 410-7	0-747-8770		Phone No.: <u>410-747-8770</u> Email : invoicing@ph	ne No.: 410-747-8770 Email : invoicing@nhaseonline.com	
Prep:UNKNOWN		<b></b>	Email Results to : Amber Confer	ber Confer	800 00	P.O. No.: OD	P.O. No.: <u>ODC 4920002-001</u>	Call for Credit Card Info
						〔 〔		
Need Results By:	(surcharge)		<b>Z</b>	Samples submitted usi	Samples submitted using the FreePumpLoan <sup>IM</sup> Program	]	Samples submitted using the FreeSamplingBadges" Program	dges''' Program
☑ KM Standard	%0	Site Name: John Adams	Adams	Pr	Project: ACPS IAQ testing - 4920002	sting - 4920002 Sampled by:	Karl Ford	
☐ 4 Business Days	35%	Comments:						
3 Business Days	%09	Dosimeter cartrige #	rige# noted in the	(Hexavelent Ch	noted in the (Hexavelent Chromium Process) colum	colum		
2 Business Days	75%					ľ		
☐ Next Day by 6pm		List description of inc	List description of industry or Process/interferen	rences present in sampling area	oling area:	State samples were Please collected in (e.g., NY)	Please indicate which OEL this data will be used for :	will be used for:
Next Day by Noon	150%	Public grade	Public grade school building					
Sample Identification* (Maxmium of 20 Characters)	ication* haracters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium :e^ Process (e.g., welding plating, painting, etc.)*
JA - Cafeteria		08/19/21	Assay N581 Aldehyde Badge	248	Min	Formaldehyde	mod. OSHA 1007: TPLC/JUV	200 PD5407
JA - Hall 149		08/19/21	Assay N581 Aldehyde Badge	252	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	nov PD4139
JA - Class 147		08/19/21	Assay N581 Aldehyde Badge	255	Min	Formaldehyde	mod, OSHA 1007: TPLC/UV	ουν PD5051
JA - Class 140		08/19/21	Assay N581 Aldehyde Badge	246	Min	Formaldehyde	mod. OSHA 1007; ТРLС/UV PD5296	200v PD5296
JA - Gym		08/19/21	Assay N581 Aldehyde Badge	240	Min	Formaldehyde	mod, OSHA 1007; TPLC/UV	200v PD4100
JA - Class 125		08/19/21	Assay N581 Aldehyde Badge	259	Min	Formaldehyde	mod, OSHA 1007: TPLC/UV	200v PD4804
JA - Class 116		08/19/21	Assay N581 Aldehyde Badge	240	Min	Formaldehyde	mod, OSHA 1007: TPLC/JJV	200v PD4015
JA - Class 109		08/19/21	Assay N581 Aldehyde Badge	230	Min	Formaldehyde	mod, OSHA 1007: TPLC/UV	Nov PD4749
JA - Lobby		08/19/21	Assay N581 Aldehyde Badge	251	Min	Formaldehyde	mod. OSHA 1007: TPLC/JUV	200v PD4492
JA - Office 157	on	08/19/21	Assay N581 Aldehyde Badge	243	Min	Formaldehyde	mod, OSHA 1007; TPLC/UV	200 PD4079
JA - Class 164	2 12	08/19/21	Assay N581 Aldehyde Badge	248	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	cnv PD4833
^Galson Laboratories wi	ill subsititute our	routine/preferred met	hod if it does not match	the method listed on t	Agalson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked:	s checked: 🖊 Use method(s) listed on COC	ın COC	
For metals analysis: if re	questing an analy	te with the option of	a lower LOQ, please indi	icate if the lower LOQ i	is required (only availabl	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)*	m(s) of silica need	fed must be indicated	(Quartz, Cristobalite, ar	nd/or Tridymite)* :				
Chain of Custody	Prir	Print Name/Signature		Date Time		Print Name/Signature	ture	Date Time
Relinquished by:	C114	Lant	813	7512 1735	Received by:	31	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	47/1/2/2
Relinquished by:	4	とと			Heceived by	אפווכ הומטכ יייכיש	Z Z	7114 1117
		*	Sampleः रेequired क्ट्रिक्टिक्सिम्	s received after 3pm e+o complete tbese	Samples received after 3pm will be considered as next day's business ৪. failure to complete these tiglds may result in a delay in দ্রু দেশ্যে কিন্দু স্বিদ্যু	Samples received after 3pm will be considered as next day's business * Required fields, failure to complete tbesse (iglds may resyl) in a delay ie দুন্দুণ-ঙ্গলাস্কৃলি processed.	essed.	Page 1 of 2
			rade o oi	/ Nepoll Delt	aeilce, i geileiait	30.02=3557=41.10.12		

Page 8 of 14

## 21087539

SGS GALSON	ALSON	<b>-</b>	Report To* : Ph. 663	Report To*: Phase Separation Science 6630 Baltimore National Pike	cience onal Pike	Invoice To* :	Invoice To* : Phase Separation Science	tion Scien	eg.
		Client Account No.*:	·						
6601 Kirkville Rd East Syracuse, NY 13057 Tel: (315) 432-5927	e Rd ee, NY 13057 2-5227		Phone No.* :410	0-747-8770		Phone No.: 4	Phone No.: 410-747-8770	acc onilar	
888-432-	LABS (5227)	Ē	Email Results to : Amber Confer	ber Confer		P.O. No. : C	J. No.: ODC 4920002-001	1	
www.sgsgalson.com	son.com		Email address: rep	Email address: reporting@phaseonline.com	ne.com	Credit Card :	Card on File	Call for Credit Card Info.	Card Info.
	(open dome)		2	Samples submitted usir	Samples submitted using the FreePumpLoan <sup>™</sup> Program		Samples submitted using the FreeSamplingBadges™ Program	mplingBadges™	Program
Need Results by:	(surcharge)	Site Name . Inhn Adams	Jams	Pro	Project ACPS IAQ tes	ACPS IAQ testing - 4920002 Sampled by:	/: Karl Ford		
4 Business Days	35%	Comments:							
3 Business Days	20%	Dosimeter cartrige # noted in the	se # noted in the		(Hexavelent Chromium Process) colum	olum			
2 Business Days	75%				`				
Next Day by 6pm	100%	List description of indu	stry or Process/interfe	List description of industry or Process/Interferences present in sampling area:	ling area:	State samples were Pleas	Š.	this data will b	e used for :
Next Day by Noon	150%	Public grade school building	chool building				SHA PEL ACG	ACGIH_ILV	Cal OSHA
Sample Identification* (Maxmium of 20 Characters)	ation*	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method	Method Reference <sup>A</sup> F	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JA - Library		08/19/21	Assay N581 Aldehyde Badge	5	Min	Formaldehyde	mod. OSH	mod, OSHA 1007: TPLC/JUV	PD4389
JA - Class 202		08/19/21	Assay N581 Aldehyde Badge	253	Min	Formaldehyde	mod. OSH	mod. OSHA 1007. TPLC/JV	PD4479
077	AN.W	08/19/21	Assay N581 Aldehyde Badge	250	Min	Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/JUV	PD4811
JA - Class 222	*	08/19/21	Assay N581 Aldehyde Badge	256	Min	Formaldehyde	mod, OSH	mod. OSHA 1007: TPLC/UV	PD4743
			Assay N581 Aldehyde Badge			Formaldehyde	MOd. DSH	mod. OSHA 1007; TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
			Assay N581 Aldehyde Badge			Formaldehyde	mod. OSH	mod. OSHA 1007: TPLC/UV	
^Galson Laboratories will subsititute our routine/preferred method if it does not match	subsititute our	routine/preferred metho	od if it does not match	the method listed on th	ne COC unless this box is	the method listed on the COC unless this box is checked: 🗸 Use method(s) listed on COC	d on COC		
For metals analysis: if requ	uesting an anal	yte with the option of a	lower LOQ, please inc	licate if the lower LOQ is	s required (only available	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)*	(s) of silica nee	ded must be indicated ((	Duartz, Cristobalite, a	nd/or Tridymite)* :					
Chain of Custody	Pri	Print Name/Signature		Date Time		Print Name/Signature	nature	Date	Time
Relinquished by:	3	16nt	81	8151V 1755	Received by :		$d_{i}$	1	<b>* * * * * * * * * *</b>
Relinquished by :	2	とりない			Received by: 11 Che	36	Puchalle troum	128-1	11   72
	•	* Re	Sample quired मिंडोवुठ <sub>न</sub> क्षिण	s received after 3pm e to পেলুচাহার চ্ছিপ্ত	Samples received after 3pm will be considered as next day's business Is failure to ceonologa these fields may result in a delay in From Sample	Samples received after 3pm will be considered as next day's business * Required गुंबपुर्फ किया एक रिक्प्यानिस क्रिक्ट गिंहपिंद क्राव्य सुंह्यपी गित्र निस्त्र पुरान्य क्रियानिस्ट्रिक Processed.	rocessed.	Pa	Page 2 of 2
			0 000						

Page 9 of 14

# Chain of Custody Form for Subcontracted Analyses

Page 1 of 1

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

21082539 W.O. No. :

Project Number: 4920002 Report To LOD: No

Project Location: Samuel Fueker Elementary John Adams

East Syracuse, NY 13057 6601 Kirkville Road

an sall

SGS North America - NY Samples Transferred To:

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

For Questions or issues please contact: Amber Confer

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

												_		,	,
Preservative	NON														
Type of Container	NONSC														
Method	VARIOUS														
Analyses Required	Formaldehyde (mod. OSHA 1007; HPLC/UV)														
Matrix	Air														
Time Sampled	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
Date Sampled	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21	08/19/21
Field Sample ID	JA-Cafeteria	JA-Hall 149	JA-Class 147	JA-Class 140	JA-Gym	JA-Class 125	JA-Class 116	JA-Class 109	JA-Lobby	JA-157	JA-Class 164	JA-Library	JA-Class 202	JA-Hall 220	JA-Class 222
Lab Sample ID	21082539-001	21082539-002	21082539-003	.21082539-004	21082539-005	21082539-006	21082539-007	21082539-008	21082539-009	21082539-010	21082539-011	21082539-012	21082539-013	21082539-014	21082539-015

Data Deliverables Required: COA

reporting@phaseonline.com Send Report Attn:

Send InvoiceAttn: invoicing@phaseonline.com

Perform Q.C. on Sample:

Carrier: Airbill No.:

Condition Upon Receipt:

Comments:

Samples Relinquished By: Orly	Date:	Time:	Samples Received By :
Samples Relinquished By:	Date:	Time:	Samples Received By:
Samples Relinquished By:	Date: Page 7	of 7 Report Re Time:	Page 7 of 7. Report Reference: 1 Generated 1940 ER REGISTER FOR LANGE FOR THE TIME: STANDING RECEIVED BY: Various Found 1970 Page 10 of 10



## **Case Narrative**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082539

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 010 reads JA-157. Per client, logged in as JA-157. Container label for COC sample 014 reads JA-Hall 220. Per client, logged in as JA-Hall 220.

21082539: 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.

## 21082539

Ses	SGS GALSON	New Client? F	(eport To*:	Report To*: Phase Separation Science 6630 Baltimore National Pike Baltimore, MD 21228	Science lional Pike 28	Invoice To*	Invoice To*: Phase Separation Science	ation Scie	eou	
6601 k East S Tel: (3	6601 Kirkville Rd East Syracuse, NY 13057 Tel: (315) 432-5227		Phone No.* :410-747-8770 Cell No. :	10-747-8770		Phone No.:	Phone No.: 410-747-8770 Email: invoicing@phaseonline.com	eonline.com		
www.s	888-432-LABS (5227) www.sgsgalson.com		Email Results to : Amber Confer Email address: reporting@pha	nail Results to : Amber Confer Email address: reporting@phaseonline.com	line.com	P.O. No. : Credit Card :	P.O. No. : <u>ODC 4920002-001</u> dit Card : Card on File	001 Call for Credit Card Info.	it Card Info.	
	F		2		Samples submitted using the FreePumpLoan <sup>TM</sup> Program		Samples submitted using the FreeSamplingBadges <sup>™</sup> Program	SamplingBadges	M Program	Ī.
Need Results By:	r: (surcharge)									
Standard	%0	Site Name: John Adams	dams	a.	Project: ACPS IAQ te	ACPS IAQ testing - 4920002 sampled by:	by: Karl Ford			
4 Business Days	35%	Comments:								
3 Business Days	Days 50%	Dosimeter cartri	Dosimeter cartrige # noted in the	ne (Hexavelent Ch	(Hexavelent Chromium Process) colum	colum				
Next Day by 6pm	100%	List description of industry or Process/interfe	ustry or Process/interf	ferences present in sampling area:	pling area:		whic	EL this data will I	be used for:	
Next Day by Noon	loon 150%	Public grade school building	chool building			collected in (e.g., NY)	SHA PEL AC	ACGIH TLV Other (specify):	Cal OSHA	4
Sample Ic (Maxmium o	ificatio Charact	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.)*	romium welding ng, etc.)*
A - Cafeteria		08/19/21	Assay N581 Aldehyde Badge	24	Min	Formaldehyde	mod, O	mod, OSHA 1007: TPLC/UV	PD5407	j
A - Hall 149		08/19/21	Assay N581 Aldehyde Badge	e 252	Min	Formaldehyde	mod. O	mod. OSHA 1007: TPLC/UV	PD4139	
A - Class 147		08/19/21	Assay N581 Aldehyde Badge	3e 255	Min	Formaldehyde	mod. Os	mod. OSHA 1007: TPLC/UV	PD5051	
A - Class 140		08/19/21	Assay N581 Aldehyde Badge	246	Min	Formaldehyde	mod. Os	mod. OSHA 1007: TPLC/UV	PD5296	
A - Gym		08/19/21	Assay N581 Aldehyde Badge	240	Min	Formaldehyde	mod. OS	mod. OSHA 1007: TPLC/UV	PD4100	
A - Class 125		08/19/21	Assay N581 Aldehyde Badge	le 259	Min	Formaldehyde	mod, OS	mod. OSHA 1007: TPLC/UV	PD4804	
A - Class 116		08/19/21	Assay N581 Aldehyde Badge	Pe 240	Min	Formaldehyde	mod. O3	mod. OSHA 1007: TPLC/UV	PD4015	
A - Class 109		08/19/21	Assay N581 Aldehyde Badge	<sub>3e</sub> 230	Min	Formaldehyde	mod, Os	mod. OSHA 1007: TPLC/UV	PD4749	
A - Lobby		08/19/21	Assay N581 Aldehyde Badge	Pe 251	Min	Formaldehyde	mod. OS	mod. OSHA 1007: TPLC/UV	PD4492	
A - Office- 15	707	08/19/21	Assay N581 Aldehyde Badge	PP 243	Min	Formaldehyde	mod. OS	mod. OSHA 1007: TPLC/UV	PD4079	
A - Class 164	10718	08/19/21	Assay N581 Aldehyde Badge	Pe 248	Min	Formaldehyde	mod, Os	mod, OSHA 1007: TPLC/UV	PD4833	
^Galson Laboratori	^Galson Laboratories will substittute our routine/preferred method if it does not match	outine/preferred meth	od if it does not mate	th the method listed on	the COC unless this box i	AGalson Laboratories will substitute 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	sted on COC			
For crystalline silica	For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)*:	e with the option of a	Quartz, Cristobalite, 8	and/or Tridymite)*:	discount of the second					
Chain of Custody	Prin	Print Name/Signature		Date Time		Print Name/Signature	ignature	Date		Time
Relinquished by:	Clien	tant	813	751 MIST	S Received by :	ander The	S			
Relinquished by:	and	Men T.	-		Received by:					
		* Re	Sample squired fields, failu	es received after 3pm re to complete these	Samples received after 3pm will be considered as next day's business is, failure to complete these fields may result in a delay in your sample	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.	processed.	Pa	Page 1 of	2
		2	A CONTRACTOR OF THE PARTY OF TH							1

Page 12 of 14

## 21082539

SGS GALSON	_	New Client? F	Report To*: Pha 663 Ball	Report To*: Phase Separation Science 6630 Baltimore National Pike Baltimore, MD 21228	cience onal Pike 8	Invoice T	o*:Phase Se	Invoice To*: Phase Separation Science	ance
6601 Kirkville Rd East Syracuse, NY 13057 Tel: (315) 432-5227	13057		Phone No.* :410 Cell No.:	0-747-8770		Phone I Em	Phone No.: <u>410-747-8770</u> Email: invoicing@phs	ne No.: 410-747-8770 Email : invoicing@phaseonline.com	
888-432-LABS (5 www.sgsgalson.com	(5227) om	Emai	Email Results to : Amber Confer Email address: reporting@pha	nail Results to : Amber Confer Email address: reporting@phaseonline.com	ne.com	P.O. No. : Credit Card :	P.O. No. : <u>ODC 4920002-001</u>	002-001 e Call for Credit Card Info.	dit Card Info.
Need Results Bv:	surchardel		7	amples submitted usi	Samples submitted using the FreePumpLoan <sup>TM</sup> Program		submitted using the	Samples submitted using the FreeSamplingBadges <sup>™</sup> Program	s <sup>na</sup> Program
p.e	+	Site Name: John Adams	ms	å	Project: ACPS IAQ testing - 4920002		Sampled by: Karl Ford	ord	
4 Business Days 35	35% Comments:	ents:							
	50% Dosir	Dosimeter cartrige # noted in th	# noted in the	(Hexavelent Chi	e (Hexavelent Chromium Process) colum	olum			
2 Business Days 75	75%	)							
Next Day by 6pm 10	100% List des	cription of industry	or Process/interfer	List description of industry or Process/interferences present in sampling area:	ling area:	State samples were	Please indicate w	Please indicate which OEL this data will be used for:	be used for :
Next Day by Noon         150%           Same Day         200%		Public grade school building	guilding loc			collected in (e.g., NY)	OSHA PEL MSHA	ACGIH TLV Other (specify):	Cal OSHA
Sample Identification* (Maxmium of 20 Characters)		Date Sampled C	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	ested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
A - Library	80	08/19/21 Asse	Assay N581 Aldehyde Badge	244	Min	Formaldehyde		mod, OSHA 1007; TPLC/UV	PD4389
IA - Class 202	80	08/19/21 Asse	Assay N581 Aldehyde Badge	253	Min	Formaldehyde		mod. OSHA 1007: TPLC/UV	PD4479
1A - Hall 213 220 07	80 MILIO	08/19/21 Assa	Assay N581 Aldehyde Badge	250	Min	Formaldehyde		mod. OSHA 1007: TPLC/UV	PD4811
A - Class 222		08/19/21 Asset	Assay N581 Aldehyde Badge	256	Min	Formaldehyde		mod. OSHA 1007: TPLC/UV	PD4743
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod. OSHA 1007: TPLC/UV	
		Asse	Assay N581 Aldehyde Badge			Formaldehyde		mod, OSHA 1007: TPLC/UV	
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod. OSHA 1007; TPLC/UV	
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod, OSHA 1007: TPLC/UV	
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod. OSHA 1007: TPLC/UV	
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod. OSHA 1007: TPLC/UV	
		Assa	Assay N581 Aldehyde Badge			Formaldehyde		mod. OSHA 1007: TPLC/UV	
^Galson Laboratories will subsititute our routine/preferred method if it does not match	tute our routine/	preferred method i		he method listed on th	ne COC unless this box is	the method listed on the COC unless this box is checked: 🖊 Use method(s) listed on COC	s) listed on COC		
For metals analysis: If requesting an analyte with the option of a lower LOC, please indicate if the lower LOC 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)*:	an analyte with t	the option of a low t be indicated (Qua	er LOU, please indic rtz, Cristobalite, and	nd/or Tridymite)* :	s required (only available	s for certain analytes - see SP	(0):		
Chain of Custody	Print Name	Print Name/Signature	٥	Date Time		Print Nam	Print Name/Signature	Date	e Time
Relinquished by :	Chent		812512	1755 MI	Received by:	ale	1 cm		
Relinquished by :	ser!	7 con		•	Received by:		•		
		* Requi	Samples red fields, failure	received after 3pm to complete these	Samples received after 3pm will be considered as next day's business is, failure to complete these fields may result in a delay in your sample	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.	ing processed.	4	Page 2 of 2
				Pa	Page 13 of 14	Version	Version 1.000		



## Sample Receipt Checklist

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

Project Name: ACPS IAQ Testing PSS Project No.: 21082539

Client Name Total Environmental Concepts - Lorto Received By Amber Confer

**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 <u>Karl Ford</u>

COC agrees with sample labels? No 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 Total No. of Samples Received 15

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

## **Preservation**

100017441011		
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 01	0 reads JA-157. Po	er client, logged in as J	JA-157.
Container label for	COC sample 01	4 reads JA-Hall 220	<ol><li>Per client, logged in</li></ol>	as JA-Hall 220.

Samples Inspected/Checklist Completed By:	Jules I longer	Date: 08/26/2021	
	Amber Confer		

PM Review and Approval: Date: 08/26/2021

Lyn**ima.gechisioont 14** 

ccc .		New Client?	Report To* :					Invoice T	o*:				
303	ALSO												
		Client Account	NO.^:										
6601 Kirkvi			- Phone No * :					Phone N					
East Syracuse, NY 13057 Tel: (315) 432-5227			Cell No :					Phone No.:					
888-43	888-432-LABS (5227) Email Resu												
www.sgsga	alson.com	•						Credit Card : Card on File Call for Credit Card Info.					
Email address: Credit Card : Card on File Call for Credit Card							ant Gara ii	110.					
Need Results By:	(surcharge)		Samples submitted using the FreePumpLoan <sup>™</sup> Program Samples submitted using the FreeSamplingBadges <sup>™</sup> Program							am			
Standard	0%	Site Name :			Pro	ject :		Samı	pled by :				
4 Business Days	35%	Comments :											
3 Business Days	50%												
2 Business Days	75%												
Next Day by 6pm	100%	List description of ind	ustry or Process/interfer	ences presen	t in sampl	ing area :	State samples		Please indicate w				
Next Day by Noon	150%	-					collected in (e.	.g., NY)	OSHA PEL	_		Cal (	OSHA
Same Day	200%		ı						MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 C		Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*  Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requested*		Method Reference <sup>^</sup> Process (6		nt Chromium e.g., welding painting, etc.)*			
^Galson Laboratories wi	II subsititute ou	r routine/preferred meth	nod if it does not match	the method li	sted on the	e COC unless this box is	s checked:	Use method(s	s) listed on COC	1			
For metals analysis: if re	questing an ana	lyte with the option of a	lower LOQ, please indi	cate if the lov	ver LOQ is	required (only availabl	e for certain ana	alytes - see SA	AG):				
For crystalline silica: forr	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:								
Chain of Custody	Chain of Custody Print Name/Signature Date Time Print Name/Signature Date Time							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.  Page of													

ccc .		New Client?	Report To* :					Invoice T	o*:				
303	ALSO												
		Client Account	NO.^:										
6601 Kirkvi			- Phone No * :					Phone N					
East Syracuse, NY 13057 Tel: (315) 432-5227			Cell No :					Phone No.:					
888-43	888-432-LABS (5227) Email Resu												
www.sgsga	alson.com	•						Credit Card : Card on File Call for Credit Card Info.					
Email address: Credit Card : Card on File Call for Credit Card							ant Gara ii	110.					
Need Results By:	(surcharge)		Samples submitted using the FreePumpLoan <sup>™</sup> Program Samples submitted using the FreeSamplingBadges <sup>™</sup> Program							am			
Standard	0%	Site Name :			Pro	ject :		Samı	pled by :				
4 Business Days	35%	Comments :											
3 Business Days	50%												
2 Business Days	75%												
Next Day by 6pm	100%	List description of ind	ustry or Process/interfer	ences presen	t in sampl	ing area :	State samples		Please indicate w				
Next Day by Noon	150%	-					collected in (e.	.g., NY)	OSHA PEL	_		Cal (	OSHA
Same Day	200%		ı						MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 C		Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*  Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requested*		Method Reference <sup>^</sup> Process (6		nt Chromium e.g., welding painting, etc.)*			
^Galson Laboratories wi	II subsititute ou	r routine/preferred meth	nod if it does not match	the method li	sted on the	e COC unless this box is	s checked:	Use method(s	s) listed on COC	1			
For metals analysis: if re	questing an ana	lyte with the option of a	lower LOQ, please indi	cate if the lov	ver LOQ is	required (only availabl	e for certain ana	alytes - see SA	AG):				
For crystalline silica: forr	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:								
Chain of Custody	Chain of Custody Print Name/Signature Date Time Print Name/Signature Date Time							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.  Page of													

**Appendix E:** 4-PCH Analytical Results



## **Certificate of Analysis**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082538

September 3, 2021

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

Reference: PSS Project No: 21082538

Project Name: ACPS IAQ Testing Project Location: John Adams

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) **21082538**.

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.

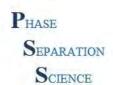
We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal

Laboratory Manager





## **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082538

## Project ID: 4920002

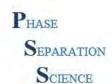
The following samples were received under chain of custody by Phase Separation Science (PSS) on 08/25/2021 at 05:35 pm

PSS Sample ID	Sample ID	Matrix Date/	Time Collected
21082538-001	JA-Cafeteria	AIR 08	8/19/21 00:00
21082538-002	JA-Hall 149	AIR 08	8/19/21 00:00
21082538-003	JA-Class 147	AIR 08	8/19/21 00:00
21082538-004	JA-Class 140	AIR 08	8/19/21 00:00
21082538-005	JA-Gym	AIR 08	8/19/21 00:00
21082538-006	JA-Class 125	AIR 08	8/19/21 00:00
21082538-007	JA-Class 116	AIR 08	8/19/21 00:00
21082538-008	JA-Class 109	AIR 08	8/19/21 00:00
21082538-009	JA-Lobby	AIR 08	3/19/21 00:00
21082538-010	JA-157	AIR 08	8/19/21 00:00
21082538-011	JA-Class 164	AIR 08	8/19/21 00:00
21082538-012	JA-Library	AIR 08	8/19/21 00:00
21082538-013	JA-Class 202	AIR 08	8/19/21 00:00
21082538-014	JA-Hall 220	AIR 08	8/19/21 00:00
21082538-015	JA-Class 222	AIR 08	3/19/21 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.



## **Explanation of Qualifiers**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082538

## 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.
- 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



Ms. Amber Confer Phase Separation Science, Inc. 6630 Baltimore National Pike Baltimore, MD 21228 September 02, 2021

Account# 15354 Login# L545231

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

Lisa Luab

Enclosure(s)



## ANALYTICAL REPORT

Account : 15354 Login No. : L545231

## **Terms and Conditions & General Disclaimers**

- This document is issued by the Company under its General Conditions of Service accessible at <a href="http://www.sgs.com/en/Terms-and-conditions.aspx">http://www.sgs.com/en/Terms-and-conditions.aspx</a>. 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 <a href="https://www.sgsgalson.com">www.sgsgalson.com</a>.
- 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.

Accreditation/Recognition

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 <a href="http://www.sgsgalson.com">http://www.sgsgalson.com</a> 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.

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	Lab ID: 1042	Mold Analysis Laboratory license		
	Regulation				

Lab ID#

## Legend

National/International

< - Less than MDL - Method Detection Limit ppb - Parts per Billion mg - Milligrams > - Greater than ug - Micrograms NA - Not Applicable ppm - Parts per Million I - 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

Program/Sector



## LABORATORY ANALYSIS REPORT

## **GALSON**

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227

FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc. Account No.: 15354 Site : JOHN ADAMS Login No. : L545231

Project No. : ACPS IAQ TESTING-4920002

Date Sampled : 19-AUG-21 Date Analyzed : 31-AUG-21 - 01-SEP-21

Date Received : 27-AUG-21 Report ID : 1262968

## 4-Phenylcyclohexene (4PCH low LOQ)

		Air Vol	Front	Back	Total	Conc	ppm
<u>Sample ID</u>	<u>Lab ID</u>	liter	uq	<u>uq</u>	uq	mq/m3	
JA-CAFETERIA	L545231-1	49.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-HALL 149	L545231-2	50.4	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-CLASS 147	L545231-3	51	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-CLASS 140	L545231-4	49.2	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-GYM	L545231-5	48	<0.2	<0.2	<0.2	<0.004	<0.0007
JA-CLASS 125	L545231-6	51.8	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-CLASS 116	L545231-7	48	<0.2	<0.2	<0.2	<0.004	<0.0007
JA-CLASS 109	L545231-8	46	<0.2	<0.2	<0.2	<0.004	<0.0007
JA-LOBBY	L545231-9	50.2	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-157	L545231-10	48.6	<0.2	<0.2	<0.2	<0.004	<0.0007
JA-CLASS 164	L545231-11	49.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-LIBRARY	L545231-12	48.8	<0.2	<0.2	<0.2	<0.004	<0.0007
JA-CLASS 202	L545231-13	50.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-HALL 220	L545231-14	50	<0.2	<0.2	<0.2	<0.004	<0.0006
JA-CLASS 222	L545231-15	51.2	<0.2	<0.2	<0.2	<0.004	<0.0006

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

Level of Quantitation: 0.2 ug Submitted by: BDK Approved by: MLN

Analytical Method : mod. NIOSH 1501; GC/PID Date : 02-SEP-21

Collection Media : 226-01 Supervisor : KAG



6601 Kirkville Road East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

(315) 432-5227

LABORATORY FOOTNOTE REPORT

# GALSON

Client Name : Phase Separation Science, Inc.

Site : JOHN ADAMS

Project No. : ACPS IAQ TESTING-4920002

Date Sampled: 19-AUG-21 Account No.: 15354
Date Received: 27-AUG-21 Login No.: L545231

Date Analyzed: 31-AUG-21 - 01-SEP-21

L545231 (Report ID: 1262968):

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

L545231 (Report ID: 1262968):

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 Phanalanalahanana (4PQU lan 100)	. / 100	00.28
4-Phenylcyclohexene (4PCH low LOQ)	+/-18%	88.2%

	,		545	231		21082	538						
	SGS	GALSO	New Client	Report To* : Pha	ase Separation So 30 Baltimore Nation timore, MD 21228	cience onal Pike		* :Phase Se	paration Sci	ence			
<b>Z</b> 23	13E401669727	48	Client Account	NO.":						1	<del>}</del>		
ate	:08/27/21 per:UPS		-		. 747.0770		Dhone N	Phone No : 440 747 0770					
nit	ials:MAK			Phone No.* : <u>41(</u> Cell No. :	)-/4/-8//0			Phone No.: 410-747-8770  Email: invoicing@phaseonline.com					
			,	Email Results to : Am	han Canfan					<u> </u>			
	: UNKNOUN		•		orting@phaseonlir	ne com		P.O. No. : ODC 4920002-001  Credit Card : Card on File Call for Credit Card Info.					
			. ^		or angeonin	10.00111		Gara on the			·.		
	Need Results By:	(surcharge)	[KRD]		Samples submitted usir			<u></u>	FreeSamplingBadge	es™ Prograr	n		
	Standa	-d 0%	Site Name : John /	Adams	Pro	ject : ACPS IAQ te	sting - 4920002 Samp	led by: Karl Fo	rd				
	4 Business Da		Comments :										
	3 Business Da		4										
	2 Business Da						Chata computer ware	Planes indicate wh	ish OEL this data wi	II ha waad f			
	Next Day by 6p		List description of inc	lustry or Process/interfe	rences present in sampl	ing area :	State samples were collected in (e.g., NY)		which OEL this data will be used for :  Cal OSHA				
	Next Day by Noo Same Da		Public grade s	school building		VA		Other (specify):					
<u></u>	Sample Ider	ntification*	Date Sampled	226 -6 Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Reque	ested*	Method Reference^	Process (e.	t Chromium .g., welding inting, etc.)*		
JA -	- Cafeteria		08/19/21	Assay N581 Aldehyde Badge	49.6	L	4-Phenylcyclohexene		mod, OSHA 1007: TPLC/UV	,			
	- Hall 149		08/19/21	Assay N581 Aldehyde Badge	50.4	L	4-Phenylcyclohexene		mod, OSHA 1007: TPLC/U\	,			
	- Class 147		08/19/21	Assay N581 Aldehyde Badge	51.0	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/UV				
	- Class 140		08/19/21	Assay N581 Aldehyde Badge	49.2	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/UV				
	- Gym		08/19/21	Assay N581 Aldehyde Badge	48.0	L	4-Phenylcyclohexene		mod. OSHA 1007; TPLC/UN	,			
	- Class 125		08/19/21	Assay N581 Aldehyde Badge	51.8	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/UV				
	- Class 116		08/19/21	Assay N581 Aldehyde Badge		L	4-Phenylcyclohexene		mod, OSHA 1007: TPLC/UN	,	-		
	- Class 109		08/19/21	Assay N581 Aldehyde Badge	46.0	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/UN	,			
JA ·	- Lobby	n 81 24121	08/19/21	Assay N581 Aldehyde Badge	50.2	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/UV				
٠Αلد	- Office - 151	1 241 -1	08/19/21	Assay N581 Aldehyde Badge	48.6	L	4-Phenylcyclohexene		mod, OSHA 1007: TPLC/UV				
JA ·	- Class 164		08/19/21	Assay N581 Aldehyde Badge	49.6	L	4-Phenylcyclohexene		mod. OSHA 1007: TPLC/U\	,			
^G	alson Laboratories	will subsititute ou	ır routine/preferred met	hod if it does not match	Addiethod Red In the	e cocunless this box is	s checked: 🗹 Use method(s	) listed on COC					
							e for certain analytes - see SA						
For	crystalline silica:	orm(s) of silica ne	eded must be indicated	(Quartz, Cristobalite, au	nd/or Tridymite)* :								
Cha	in of Custody	P	rint Name/Signature		Date Time		Print Nam	e/Signature	D	ate	Time		
Reli	nquished by :	Ç	hent	81.	25/21 1739	Received by :	artery	With					
Reli	nquished by :	ale	1 2 WIL	$\overline{}$		Received b	chelle Krause M	puchelle tix	min 827	121	1(17		
			* F				s next day's business delay in your samples bei ed 172-SEP-21-12-09	ng processed.		Page_1_	of <u>2</u>		

21082538

(	SGS G	ALSON	New Client? Report			ase Sepa 30 Baltim	aration So ore Natio	ience nal Pike		Invoice To	* : <u>Phase S</u>	eparati	on Scie	nce	
		MEGGI	Client Account	No.*:	Bal	timore, N	VID 21228								
	Tel: (315) 432-5227 Cel 888-432-LABS (5227) Email Resu www.sgsgalson.com Email ad					No.*: 410-747-8770  No.:  Is to : Amber Confer  Iress: reporting@phaseonline.com					Phone No.: 410-747-8770  Email: invoicing@phaseonline.com  P.O. No.: ODC 4920002-001  Credit Card: Card on File Call for Credit Card Info.				
	Need Results By:			✓ Samples submitted using the FreePumpLoan™ Program						ubmitted using th	e FreeSamp	olingBadges	s™ Progra	m	
V	Standard	0%	Site Name : John A	Adams			Pro	ject : ACPS IAQ te	sting - 492	20002 Samp	oled by: Karl F	ord			
	4 Business Days	35%	Comments :												
	3 Business Days	50%													
	2 Business Days	75%													
	Next Day by 6pm	100%	List description of ind	lustry or Process/	interfe	rences pres	ent in sampl	ing area :	State sampl collected in		Please indicate w			_	
빝	Next Day by Noon 150% Public grade school b								VA	(4,3,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	MSHA	_		☐ car	AHSC
	Same Day 200%					Sample Valume		1 INSTIA		Other (specify):		Hexavalent Chromium			
	Sample Identification* Date Sampled Collection (Maxmium of 20 Characters)				ledium Sample Time Sample Onits":		Analysis Requested* M			Method Reference <sup>^</sup> Process (e.g., we plating, painting)		e.g., welding			
JA	- Library		08/19/21	Assay N581 Aldehyd	eBadge	48.8		L	4-Phenylcy	clohexene		mod, OSHA 1	007: TPLC/UV		
NΑ	- Class 202		08/19/21	Assay N581 Aldehyd	de Badge 50.6 L 4-Phenylcy			clohexene		mod. OSHA 1	007: TPLC/UV	·			
ŠJΑ	- Hall <del>213</del> 220		08/19/21	Assay N581 Aldehyo	e Badge	50.0		L	4-Phenylcy	clohexene		mod. OSHA 1	007: TPLC/UV		
JA	- Class 222		08/19/21	Assay N581 Aldehyd	e Badge	51.2		L	4-Phenylcy	clohexene		mod. OSHA 1	007: TPLC/UV	,	
				Assay N581 Aldehy	#FE.	8/7	7/21					mod. OSHA 1	007: TPLC/UV		
				Assay N581 Aldehyd	e Badge		•					mod. OSHA 1	007: TPLC/UV		
				Assay N581 Aldehyd	e Badge							mod. OSHA 1	007: TPLC/UV		_
				Assay N581 Aldehyo	le Badge							mod. OSHA 1	007: TPLC/UV	_	
				Assay N581 Aldehyd	e Badge							mod. OSHA 1	007: TPLC/UV		
				Assay N581 Aldehyd	e Badge							mod. OSHA 1	007: TPLC/UV		
				Assay N581 Aldehyd	e Badge			- "		<u> </u>		mod. OSHA 1	007: TPLC/UV		
^G	ialson Laboratories wil	II subsititute our	routine/preferred met	hod if it does not	match	the method	d listed on th	e COC unless this box i	s checked:	Use method(s	) listed on COC				-
Fo	r metals analysis: if red	questing an anal	yte with the option of a	a lower LOQ, plea	se ind	icate if the I	ower LOQ is	required (only availabl	e for certain a	analytes - see SA	G):				
Fo	r crystalline silica: forn	n(s) of silica nee	ded must be indicated	(Quartz, Cristoba	lite, ar	nd/or Tridyr	nite)* :			•					
Chain of Custody Print Name/Signature						Date	Time			Print Nam	e/Signature		Dat	te	Time
Rel	inquished by :	Che.	<u>it</u>		812	sm	1735		a	un 7	Wth				
Rel	inquished by :	ale	y way	\T	,			Received by	ichelle	Krause	Michally 4	, , ,	827	1/2	1117
			* F					will be considered as ields may result in a prence:1 General			ng processed.	)	Р	age_1_	of <u>2</u>



## Chain of Custody Form for Subcontracted Analyses

Page 1 of 1

Phase Separation Sci	-			D. No. :	21082538	SGS	ples Transferred To: North America - N				
6630 Baltimore Natio Baltimore, MD 2122			Proj	ect Location	: Samuel Tucker Elementary John	Adams 660	6601 Kirkville Road				
Phone: (410) 747-87	70			ject Number :			Syracuse, NY 1305	7			
Fax: (410) 788-8723			Rep	ort To LOD			Old SGS Galson Labs. bsc				
or Questions or i	issues please contact:	Amber Confer	_		oue On :09/03/21 05:00	Pho	Phone : 315-432-5227				
Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative			
21082538-001	JA-Cafeteria	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-002	JA-Hall 149	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-003	JA-Class 147	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-004	JA-Class 140	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-005	JA-Gym	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-006	JA-Class 125	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-007	JA-Class 116	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-008	JA-Class 109	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-009	JA-Lobby	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-010	JA-157	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-011	JA-Class 164	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-012	JA-Library	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-013	JA-Class 202	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-014	JA-Hall 220	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
21082538-015	JA-Class 222	08/19/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
ata Deliver	rables Required	: <u>COA</u>			Perform Q.C.	on Sample:					
	t Attn: reporting				Send I	InvoiceAttn:	invoicing@phaseo	nline.com			
ondition Upon Reco	eipt :			-							
omments :											
mples Relinquishe	d By: June	1 Date :	Т	ime:	Samples Received By :						
amples Relinquished	d By:	Date :		Гіте :	_ Samples Received By:		الم ما				
amples Relinquished	d By:	Date:	Page 7 of <sub>T</sub>	Report	Reference: 1 General ection SEP Samples Received By: Page 10 of 14	Version 1.000	Kjanus 8.	ener vi			



#### **Case Narrative**

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

Project Name: ACPS IAQ Testing

PSS Project No.: 21082538

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 010 reads JA-157. Per client, logged in as JA-157. Container label for COC sample 014 reads JA-Hall 220. Per client, logged in as JA-Hall 220.

21082538: 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.

21082538

(	SGS G	ALSON	New Client	663	ase Sepa 30 Baltim Itimore, M		Invoice 7	o*:Phase	Separation	Scie	ence			
	6601 Kirkvil		-		747 077	'A			Phone No : 440 747 0770					
	East Syracu Tel: (315) 4	ise, NY 13057 32-5227		Phone No.*:41( Cell No.:	)-/4/ <del>-</del> 8//	0			Phone No.: 410-747-8770					
		2-LABS (5227)			har Canfe				P.O. No.: ODC 4920002-001					
	www.sgsga	alson.com	Email Results to : Amber Confer  Email address: reporting@phaseonline.com							rd: Card on		for Cred	dit Card In	fo
					orangasp	11000011111	10.00111		_			,,,,		
	Need Results By:	(surcharge)			Samples sub	mitted usin	ng the FreePumpLoan™	Program	Samples	submitted using	the FreeSamplin	gBadge	s™ Progra	m
3	Standard	0%	Site Name : John	Adams		Pro	oject: ACPS IAQ te	sting - 492	20002 Sam	pled by: Karl	Ford			
]	4 Business Days	35%	Comments :											
	3 Business Days	50%												
	2 Business Days	75%						r -						
	Next Day by 6pm	100%	List description of in	dustry or Process/interfe	rences prese	ent in sampl	ling area:	State sampl collected in			which OEL this			
	Next Day by Noon	150%	Public grade	school building					(6.g., (VI)	OSHA PEL	=		Cal C	SHA
	Same Day	200%	, asiis grade	1			VA		MSHA	Other (spe	сіту):		. 01	
	Sample Identification*  (Maxmium of 20 Characters)  Date Sampled  Collection Me			Collection Medium	Sampl	Volume le Time e Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*		ested*	Method Refe	rence^	Process (e	t Chromiur .g., welding ainting, etc.
A.	- Cafeteria		08/19/21	Assay N581 Aldehyde Badge	49.6		L	4-Phenylcy	clohexene		mod, OSHA 1007:	TPLC/UV		
JΑ	- Hall 149		08/19/21	Assay N581 Aldehyde Badge	dge 50.4 L		L	4-Phenylcyclohexene		mod. OSHA 1007:	TPLC/UV			
JA	- Class 147		08/19/21	Assay N581 Aldehyde Badge	51.0		L	4-Phenylcy	clohexene		mod. OSHA 1007:	TPLC/UV		
JΑ	- Class 140		08/19/21	Assay N581 Aldehyde Badge	49.2		L.	4-Phenylcy	clohexene		mod. OSHA 1007:	TPLC/UV		
JA	- Gym		08/19/21	Assay N581 Aldehyde Badge	48.0		L	4-Phenylcy	clohexene		mod. OSHA 1007:	TPLC/UV		
JΑ	- Class 125		08/19/21	Assay N581 Aldehyde Badge	51.8		L	4-Phenylcy	clohexene		mod, OSHA 1007:	TPLC/UV		
JA	- Class 116		08/19/21	Assay N581 Aldehyde Badge	48.0		L	4-Phenylcy	clohexene		mod, OSHA 1007:	TPLC/UV		
ΙA	- Class 109		08/19/21	Assay N581 Aldehyde Badge	46.0		L	4-Phenylcy	clohexene		mod. OSHA 1007:	TPLC/UV		
ΙΑ	- Lobby	8124121	08/19/21	Assay N581 Aldehyde Badge	50.2		L	4-Phenylcy	clohexene		mod. OSHA 1007;	TPLC/UV		
ΙA	Office 151		08/19/21	Assay N581 Aldehyde Badge	48.6		L	4-Phenylcy	clohexene		mod. OSHA 1007:	TPLC/UV		
ΙA	- Class 164		08/19/21	Assay N581 Aldehyde Badge	49.6		L	4-Phenylcy	clohexene		mod, OSHA 1007:	TPLC/UV		
		Il subsititute our	routine/preferred me	thod if it does not match	the method	listed on th	e COC unless this box is	s checked:	Use method	s) listed on COC				
_				a lower LOQ, please ind										
				(Quartz, Cristobalite, ar										
Cha	in of Custody	Prir	nt Name/Signature		Date	Time			Print Nan	ne/Signature		Dat	te	Time
Reli	nquished by :	Ch	ent	81-	25/21	1735	Received by :	a	tery	With				
0-1	nquished by :	alen	2/5/1	^			Received by:							

21082538

S	GS c	ALSON	New Clien	t? Report To* : Ph	ase Sep 30 Baltin	nore Nation	onal Pike	_	- Invoice i	Pnase	Separation Sci	ence			
0	40	MLSUN	Client Account	Pa		MD 2122			-						
	6601 Kirkvil East Syracu	le Rd ise, NY 13057	-	Phone No.* : 410	0-747-87	70			Phone No.: 410-747-8770						
	Tel: (315) 4:	32-5227		Cell No. :					Email: invoicing@phaseonline.com						
	888-43	2-LABS (5227)		Email Results to : Am	ber Con	fer				o.: ODC 492					
	www.sgsga	Ison.com		Email address: rep		d: Card on		edit Card I	nfo.						
					Camalaa	haritted weigh	es the FreePumpl conTM	Drogram	☐ Samples	ubmitted using	the ErecCamplingPada	oo <sup>TM</sup> Drogr	200		
Nee	d Results By:	(surcharge)			Samples submitted using the FreePumpLoan™ Program Samples submitted using the FreeSamplingBadges™ Program										
<b>V</b>	Standard	0%	Site Name : John	Adams		Pro	oject: ACPS IAQ te	sting - 49	20002 Samp	oled by: Karl	Ford				
	4 Business Days	35%	Comments:												
	3 Business Days	50%													
	2 Business Days	75%													
N	ext Day by 6pm	100%	List description of in	st description of industry or Process/interferences present in sampling area : State samples were Please indicate which OEL this											
Ne	ext Day by Noon	150%	Public grade	slic grade school building											
	Same Day	200%	· come grane			MSHA	Other (specify):	T							
	Sample Identification* (Maxmium of 20 Characters)  Date Sampled  Collect			Collection Medium	Sam	le Volume ple Time ple Area*	Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requested*		Method Reference <sup>4</sup>	Process	ent Chromiur (e.g., welding painting, etc.		
JA - Library 08/19/21 Ass			Assay N581 Aldehyde Badge	48.8		L	4-Phenylcy	clohexene		mod, OSHA 1007: TPLC/U	/				
JA - C	ass 202		08/19/21	Assay N581 Aldehyde Badge	50.6		L	4-Phenylcy	clohexene		mod. OSHA 1007: TPLC/U	/			
JA - H	all <del>213</del> 220		08/19/21	Assay N581 Aldehyde Badge	50.0		L	4-Phenylcyclohexene			mod. OSHA 1007: TPLC/U	/			
JA - C	ass 222		08/19/21	Assay N581 Aldehyde Badge	51.2		L	4-Phenylcyclohexene		mod. OSHA 1007; TPLC/U	/				
		- 1		Assay N581 Aldehyde Badge							mod. OSHA 1007: TPLC/U	1			
				Assay N581 Aldehyde Badge							mod, OSHA 1007; TPLC/UV				
				Assay N581 Aldehyde Badge							mod, OSHA 1007: TPLC/U	,			
				Assay N581 Aldehyde Badge							mod, OSHA 1007: TPLC/UV				
				Assay N581 Aldehyde Badge							mod. OSHA 1007: TPLC/U\				
				Assay N581 Aldehyde Badge			4 = = 1				mod. OSHA 1007: TPLC/UV				
				Assay N581 Aldehyde Badge			1 - 1				mod, OSHA 1007: TPLC/UN	,			
^Galson	n Laboratories will	I subsititute our	routine/preferred me	thod if it does not match	the metho	d listed on th	ne COC unless this box is	s checked:	✓ Use method(s	s) listed on COC					
				a lower LOQ, please ind											
For crys	stalline silica: form	n(s) of silica need	led must be indicated	(Quartz, Cristobalite, ar	nd/or Tridy	mite)*:									
Chain of Custody Print Name/Signature				Date	Time			Print Nam	e/Signature	D	ate	Time			
Relinquished by:				82	sm	1735	Received by :	a	ter 7	Win					



### Sample Receipt Checklist

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

Project Name: ACPS IAQ Testing PSS Project No.: 21082538

Client Name Total Environmental Concepts - Lorto Received By Amber Confer

**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 <u>Karl Ford</u>

COC agrees with sample labels? No 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 Total No. of Samples Received 15

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

Preservation

16361 Valion		
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 01	10 reads JA-157.	Per client, logg	ed in as JA-15	7.
Container label for	COC sample 01	14 reads JA-Hall 2	220. Per client,	logged in as J	A-Hall 220.

Samples Inspected/Checklist Completed By:	Outer of longer	Date: 08/26/2021
	Amber Confer	

PM Review and Approval: V J J ackson Date: 08/26/2021

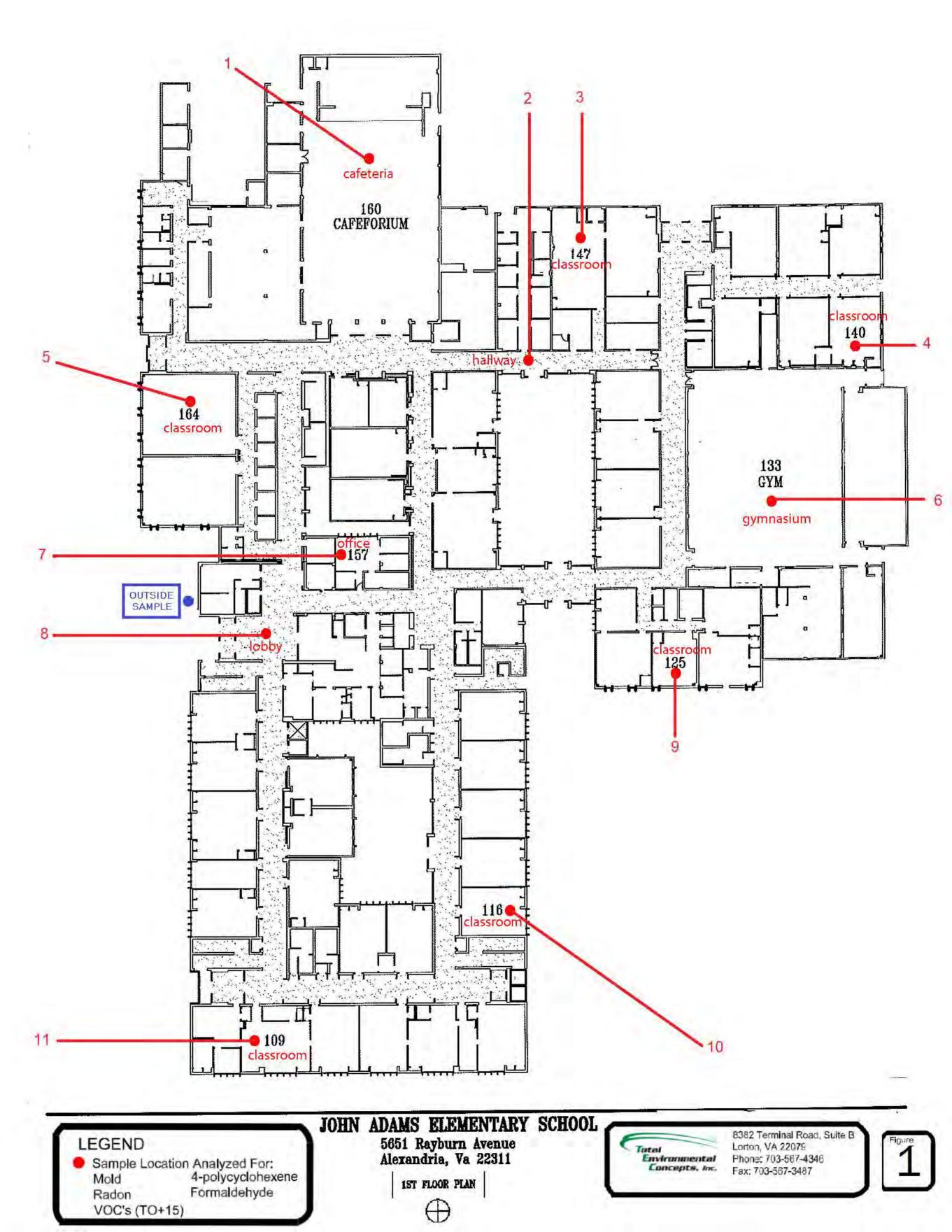
Lynthaugeechistoont 14

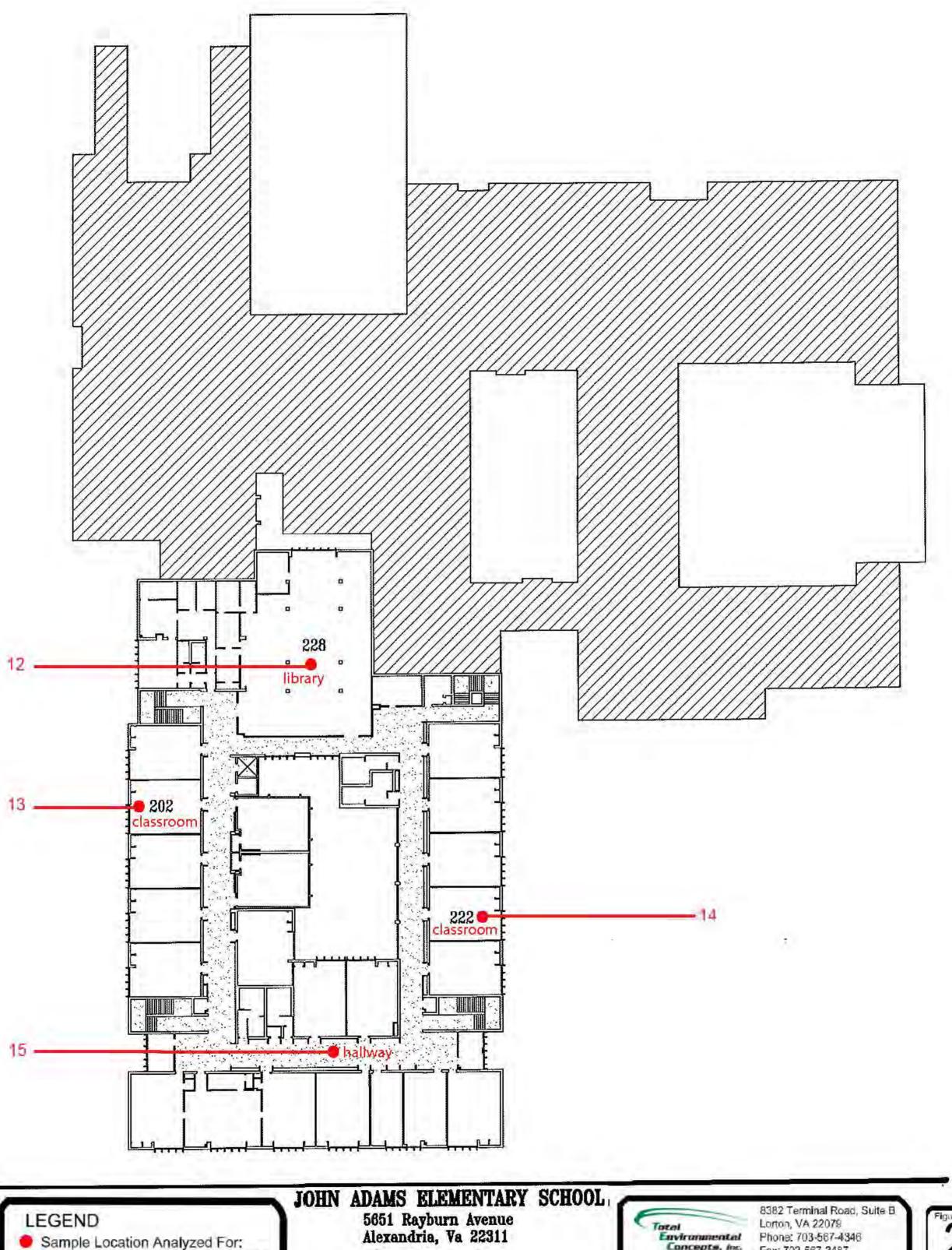
Version 1.000

ccc .		New Client?	Report To* :					Invoice T	o*:					
303	ALSO													
		Client Account I	NO.^:											
6601 Kirkvi			- Phone No * :					Phone N						
Tel: (315) 4	use, NY 13057 132-5227		Cell No :					Phone No.:						
888-43	Tel: (315) 432-5227													
www.sgsga	www.sgsgalson.com Email address:								rd : Card on Fi	le $\Box$	Call for Cred	dit Card lu	nfo	
	<u> </u>								Gard Off 1		can for cree	ait oara ii	110.	
Need Results By:	Need Results By: (surcharge) Samples submitted using the FreePumpLoan <sup>™</sup> Program Samples submitted using the FreeSamplingBadges <sup>™</sup> Program											am		
Standard	0%	Site Name :			Pro	ject :		Sam	pled by :					
4 Business Days	35%	Comments :	ints :											
3 Business Days 50%														
2 Business Days	75%													
Next Day by 6pm	100%	List description of ind	ustry or Process/interfer	ences presen	t in sampl	ing area :	State samples		Please indicate w					
Next Day by Noon	150%	-					collected in (e.	.g., NY)	OSHA PEL	_		Cal (	DSHA	
Same Day	200%		ı						MSHA	Other (	specify):			
Sample Identifi (Maxmium of 20 C								Analysis Requested* Method R			Reference^	Process (	ent Chromium (e.g., welding painting, etc.)*	
^Galson Laboratories wi	II subsititute ou	r routine/preferred meth	nod if it does not match	the method li	sted on the	e COC unless this box is	s checked:	Use method(s	s) listed on COC					
For metals analysis: if re	questing an ana	lyte with the option of a	lower LOQ, please indi	cate if the lov	ver LOQ is	required (only availabl	e for certain ana	alytes - see SA	(G):					
For crystalline silica: forr	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:									
Chain of Custody	Pr	int Name/Signature	Г	Date	Time			Print Nam	ne/Signature		Da	te	Time	
Relinquished by:						Received by :								
Relinquished by :						Received by :								
		* R	Samples equired fields, failure			will be considered as elds may result in a			ing processed.		F	age	of	

ccc .		New Client?	Report To* :					Invoice T	o*:					
303	ALSO													
		Client Account I	NO.^:											
6601 Kirkvi			- Phone No * :					Phone N						
Tel: (315) 4	use, NY 13057 132-5227		Cell No :					Phone No.:						
888-43	Tel: (315) 432-5227													
www.sgsga	www.sgsgalson.com Email address:								rd : Card on Fi	le $\Box$	Call for Cred	dit Card lu	nfo	
	<u> </u>								Gard Off 1		can for cree	ait oara ii	110.	
Need Results By:	Need Results By: (surcharge) Samples submitted using the FreePumpLoan <sup>™</sup> Program Samples submitted using the FreeSamplingBadges <sup>™</sup> Program											am		
Standard	0%	Site Name :			Pro	ject :		Sam	pled by :					
4 Business Days	35%	Comments :	ints :											
3 Business Days 50%														
2 Business Days	75%													
Next Day by 6pm	100%	List description of ind	ustry or Process/interfer	ences presen	t in sampl	ing area :	State samples		Please indicate w					
Next Day by Noon	150%	-					collected in (e.	.g., NY)	OSHA PEL	_		Cal (	DSHA	
Same Day	200%		ı						MSHA	Other (	specify):			
Sample Identifi (Maxmium of 20 C								Analysis Requested* Method R			Reference^	Process (	ent Chromium (e.g., welding painting, etc.)*	
^Galson Laboratories wi	II subsititute ou	r routine/preferred meth	nod if it does not match	the method li	sted on the	e COC unless this box is	s checked:	Use method(s	s) listed on COC					
For metals analysis: if re	questing an ana	lyte with the option of a	lower LOQ, please indi	cate if the lov	ver LOQ is	required (only availabl	e for certain ana	alytes - see SA	(G):					
For crystalline silica: forr	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:									
Chain of Custody	Pr	int Name/Signature	Г	Date	Time			Print Nam	ne/Signature		Da	te	Time	
Relinquished by:						Received by :								
Relinquished by :						Received by :								
		* R	Samples equired fields, failure			will be considered as elds may result in a			ing processed.		F	age	of	







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

2nd FLOOR PLAN



Lorton, VA 22079 Phone: 703-567-4346 Total Environmental Concepts, inc. Fax: 703-567-3487





John Adams, Library



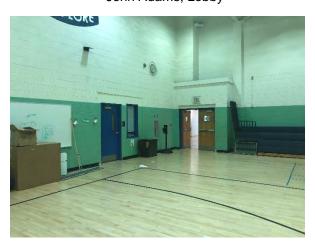
John Adams, Cafetorium



John Adams, Lobby



John Adams, Classroom



John Adams, Gym



John Adams, Office