

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

# JEFFERSON-HOUSTON ELEMENTARY SCHOOL 1501 CAMERON ST, ALEXANDRIA, VA 22314



#### Report Prepared for:

John Contreras

Alexandria City Public Schools

2601 Cameron Mills Rd, Alexandria, VA 22302

Dated: October 5, 2021

Toll Free: 877.457.TECI • www.totalenvironmental.net

# TABLE OF CONTENTS

1	Execu	tive Summary	1
2	Asses	sment Methods	3
3	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	n Gas Sampling Results	10
7	TO+15	5 (VOCs) Sampling Results	10
8	Forma	aldehyde Gas Sampling Results	10
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	13

#### **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 Minute
NTE Not to exceed

°F degree Fahrenheit
PPM Parts Per Million

#### 1. Executive Summary

Total Environmental Concepts (TEC) was contracted by Alexandria City Public Schools (ACPS) to perform Indoor Air Quality (IAQ) assessments at 19 schools. The original list is provided below:

- Alexandria City High School (AC)
- AC Satellite 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 MacArthur Elementary School (Out of Service)
- Jefferson-Houston Elementary School (JH)
- Ferdinand T. Day Elementary School (FD)
- Patrick Henry K-8 School (PH)
- Mount Vernon Community School (MV)

This IAQ assessment was conducted at Jefferson-Houston Elementary School on Friday, September 3, 2021. ACPS required that the testing 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. ACPS chose sampling locations based on internal review of facilities maintenance records, and a review of facilities maintenance-related issues. These sampling locations were selected to collect representative IAQ data in these specific areas and to document any areas of potential concern observed during the site assessment. 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 Jefferson Houston 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 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 Jefferson Houston 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 volatile organic compounds (VOCs) recorded at each location were within acceptable ranges 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 a 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 this investigation, ≤ 65%. None of the tested locations had a relative humidity greater than 65%.
- **Temperature** none of the tested spaces had temperatures greater than the ASHRAE recommended summer range of 75°F-80.5°F.

#### 2. Assessment 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, September 3, 2021. All air samples were collected three feet to six feet from the floor level, the typical breathing zone for adults.

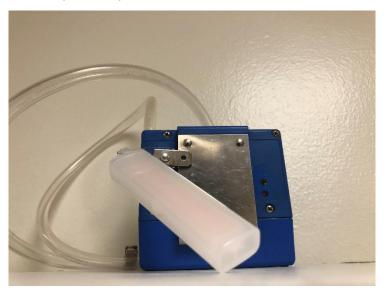
Mold air samples were collected with a field calibrated Environmental Monitoring Systems High Volume Sampling Pump on Allergenco-D Disposable IAQ Air Monitoring Cassettes at a flow rate of 10 liters per minute for a sample volume of 75 liters during the assessment (photograph below). The Hayes Microbial 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. The 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 total surface area of the sampling device for the 4 hours of sampling time. Monitors 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. Temperature 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 a multi-gas detector. These measurements can be found in Section 10 Multi-gas Detector (MSA Altair Multi-gas) Readings. This information can be found in Table 1 below.



## 3. Visual Observations

Sample Location	September 3, 2021	Visual Observations
Second Floor Dining/Work Area	View of the open dining and work area on the second floor.	ONE MAN WITH COURAGE IS A MAJORITY.  - THOMAS JEFFERSON

Entrance Lobby	View of the entrance lobby to Jefferson Houston Elementary School.	in the second se
Stairs 300	View of the exit stairwell to the thrid floor of Jefferson Houston Elementary School.	

Third Floor Stair

View of the circular stairwell on the third floor of Jefferson Houston.

#### 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 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 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 the 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 below 65% in all locations. Average relative humidity can be found in Table 2.

#### 4.3 Carbon Dioxide

Carbon dioxide (CO2) is a by-product of combustion-burning engines such as generators, furnaces, boilers, and idling automobile engines. High CO2 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.

#### 4.4 Carbon Monoxide

Carbon monoxide (CO) is a by-product 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 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 Jefferson Houston 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 break down. Some building materials, such as granite, maybe a source of radon. ACPS provided sampling areas, which did not allow for TEC to utilize the sampling protocol provided by Air Chek to perform 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 the 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. 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 C.

#### 8. 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.

#### 9. 4-PCH Sampling Results

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

#### 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-Ga	as Detector Readings		
Location	VOC	СО	OXYGEN	H2S
Reception Office	0.0	0.0	20.9	0.0
Cafeteria	0.0	0.0	20.9	0.0
Library	0.0	0.0	20.9	0.0
Theater	0.0	0.0	20.9	0.0
Hall 118	0.0	0.0	20.9	0.0
Gym	0.0	0.0	20.9	0.0
Multi-Purpose	0.0	0.0	20.9	0.0
201	0.0	0.0	20.9	0.0
218	0.0	0.0	20.9	0.0
Stairs 300	0.0	0.0	20.9	0.0
ELA 3 floor	0.0	0.0	20.9	0.0
Stairs 3 floor	0.0	0.0	20.9	0.0
329	0.0	0.0	20.9	0.0
133	0.0	0.0	20.9	0.0
Hall 14	0.0	0.0	20.9	0.0

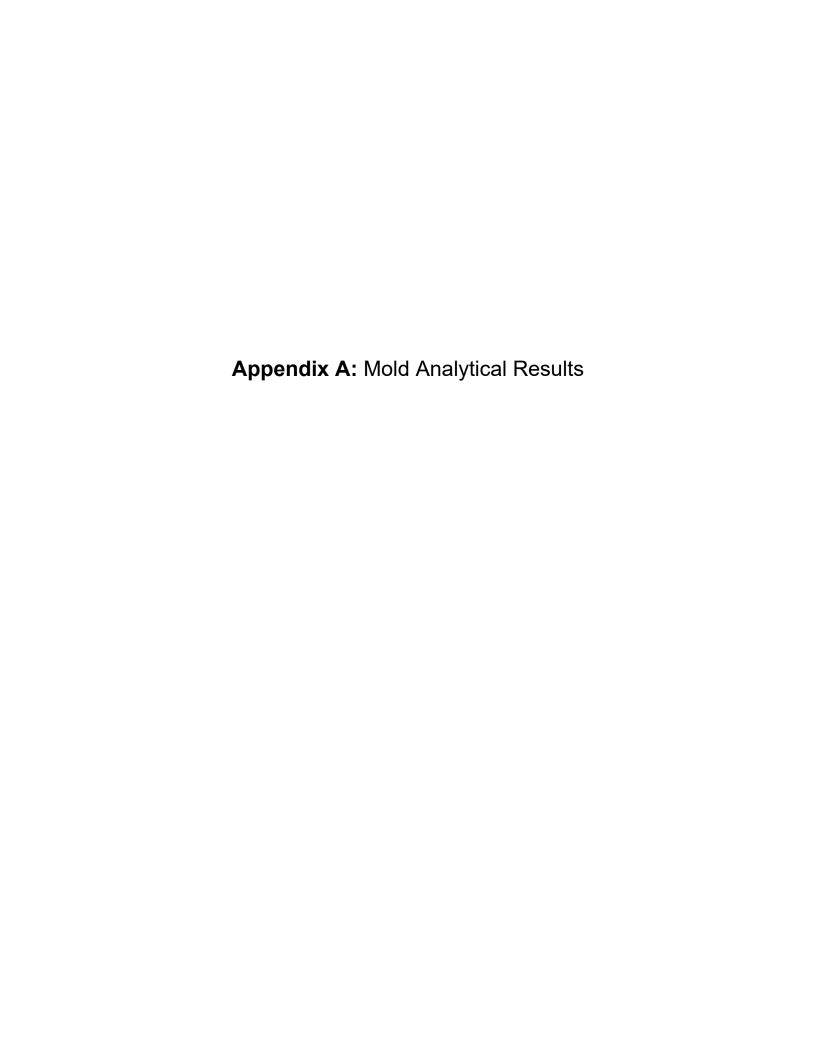
Table 2

		Results of Analytes	by Location		
Location	Radon	Mold AVG: 70 F AVG: 60	TO+15 % VOCs	4PCH	Formaldehyde
Reception Office	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Cafeteria	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Library	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Theater	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Hall 118	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Gym	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Multi-Purpose	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
201	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
218	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Stairs 300	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
ELA 3 floor	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Stairs 3 floor	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
329	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
133	< 4 pCi/L	Spore Count Normal	< RSL	< 6.5 ug/m3	< RSL
Hall 14	< 4 pCi/L	Spore Count 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 related to sample collection and processing performance.
- To ensure compliance with QA/QC measures, Standard Operating Procedures (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

Jefferson Houston

Collected: September 2, 2021 Received: September 3, 2021 Reported: September 3, 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 September 3rd, 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. Hayes

Lab ID: #188863



DPH License: #PH-0198

#21033473

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

**Spore Trap** SOP - HMC#101

Sample Number	1	JH 43	15158	2	JH 43	15164	3	JH 43	15122	4	JH 43	15137
Sample Name		JH Stair 01			JH ELA F13		•	JH Lobby 3			JH 329	
Sample Volume		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		1			2			2			2	
Fragments		ND			ND			ND			ND	
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%	6	80	85.7%	2	27	16.7%	3	40	75.0%
Aspergillus Penicillium												
Basidiospores				1	13	14.3%				1	13	25.0%
Bipolaris Drechslera												
Chaetomium												
Cladosporium							10	133	83.3%			
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	1	13	100%	7	93	100%	12	160	100%	4	53	100%
Total	1	13	100%	7	93	100%	12	160	100%	4	53	10

Water Damage Indicator

Collected: Sep 2, 2021

Project Analyst:

Common Allergen

Received: Sep 3, 2021

Slightly Higher than Baseline

Date:

Reported: Sep 3, 2021

Reviewed By:

Significantly Higher than Baseline

Ratio Abnormality

Date:

Ramesh Poluri, PhD

09 - 03 - 2021

Steve Hayes, BSMT

09 - 03 - 2021

#21033473

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

**Spore Trap** SOP - HMC#101

Sample Number	5	JH 43	15121	6	JH 43	15134	7	JH 43	15159	8	JH 43	15133
Sample Name		JH Gym		JH Multi	Purpose Ro	om 158		IH Hall 144			JH 133	
Sample Volume		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>	3
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
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	66.7%	2	27	100.0%	1	13	33.3%	3	40	50.0%
Aspergillus Penicillium												
Basidiospores	1	13	33.3%							2	27	33.3%
Bipolaris Drechslera												
Chaetomium												
Cladosporium							2	27	66.7%	1	13	16.7%
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	3	40	100%	2	27	100%	3	40	100%	6	80	100%

Water Damage Indicator

Collected: Sep 2, 2021

Common Allergen

Slightly Higher than Baseline

Significantly Higher than Baseline

Ratio Abnormality

Received: Sep 3, 2021

Reported: Sep 3, 2021

Project Analyst:

Ramesh Poluri, PhD

Date: 09 - 03 - 2021 Reviewed By:

Steve Hayes, BSMT

Date:

09 - 03 - 2021

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

(804) 562-3435

contact@hayesmicrobial.com

#21033473

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

**Spore Trap** SOP - HMC#101

Sample Number	9	JH 431	15126	10	JH 43	15163	11	JH 43	15142	12	JH 43	15136
Sample Name		JH 201			JH 218			JH Library		J	H Reception	1
Sample Volume		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>	1
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
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	naw oount	oount / m	70 01 10tai	naw oount	oount / III	70 01 10tai	naw oount	Oddit / III	70 01 10tai	naw oount	Oddit / III	70 OI 10tai
Ascospores	2	27	100.0%	1	13	100.0%	1	13	50.0%	2	27	66.7%
Aspergillus Penicillium												
Basidiospores							1	13	50.0%	1	13	33.3%
Bipolaris Drechslera												
Chaetomium												
Cladosporium												
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	2	27	100%	1	13	100%	2	26	100%	3	40	100%

MICROBIAL CONSULTING

Water Damage Indicator

Collected: Sep 2, 2021

Slightly Higher than Baseline

Significantly Higher than Baseline

Ratio Abnormality

Received: Sep 3, 2021

Reported: Sep 3, 2021

Project Analyst:

Ramesh Poluri, PhD

Common Allergen

Date: 09 - 03 - 2021 Reviewed By:

Steve Hayes, BSMT

Date:

09 - 03 - 2021

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

(804) 562-3435

contact@hayesmicrobial.com

#21033473

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

**Spore Trap** SOP - HMC#101

Sample Number	13	JH 43	15166	14	JH 43	15165	15	JH 43	15128	16	JH 43	15138
Sample Name		JH Outdoor			JH Cafe			H Hall 118			JH Theater	
Sample Volume		75.00 liter			75.00 liter			75.00 liter			75.00 liter	
Reporting Limit		13 spores/m <sup>3</sup>	1		13 spores/m <sup>3</sup>	3		13 spores/m <sup>3</sup>	1		13 spores/m <sup>3</sup>	l .
Background		2			2			2			2	
Fragments		13/m <sup>3</sup>			ND			ND			ND	
		2						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	1	13	<1%									
Ascospores	128	1707	54.5%	2	27	100.0%	1	13	100.0%	1	13	50.0%
Aspergillus Penicillium	2	27	<1%									
Basidiospores	30	400	12.8%									
Bipolaris Drechslera	2	27	<1%									
Chaetomium												
Cladosporium	72	960	30.6%									
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes										1	13	50.0%
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	235	3134	100%	2	27	100%	1	13	100%	2	26	100%
Water Damage Indicato	r	Commo	n Allergen		Slightly Higher	than Baseline	Signi	ficantly Higher	than Baseline		Ratio Abnormal	ity

Collected: Sep 2, 2021

Received: Sep 3, 2021

Reported: Sep 3, 2021

Project Analyst:

Ramesh Poluri, PhD

Date: 09 - 03 - 2021 Reviewed By:

Steve Hayes, BSMT

Date:

09 - 03 - 2021

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

(804) 562-3435

contact@hayesmicrobial.com

Page: **5** of **8** 

**Karl Ford Total Environmental Concepts, Inc.** 

Jefferson Houston

#21033473

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 an non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium ma 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.
Slightly Higher than Baseline	Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.  Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.
Significantly Higher than Baseline	
Ratio Abnormality	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%) is the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damag indicators.



**Karl Ford** Jefferson Houston **Total Environmental Concepts, Inc.** 

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

**Organism Descriptions** 

#21033473

Alternaria	Habitat:	Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.
	Effects:	A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.
Ascospores	Habitat:	A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.
	Effects:	Health affects are poorly studied, but many are likely to be allergenic.
Aspergillus Penicillium	Habitat:	The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
	Effects:	This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.
Basidiospores	Habitat:	A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.
	Effects:	Common allergens and are also associated with hypersensitivity pneumonitis.
Bipolaris Drechslera	Habitat:	They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.
	Effects:	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	Habitat:	One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.
	Effects:	A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.



**Karl Ford Total Environmental Concepts, Inc.** 

Jefferson Houston

#21033473

**Organism Descriptions** 

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

Myxomycetes

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

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



Sample   Control   Contr
11 Strive 1 /01/m   630 1638 764 11 ELA F13   643 1640 12 11 Gabby 3   643 1650 14 JH Gym 132   652 1 JH Gym 132   652 1 JH Gym 132   652 1 JH Gym 132   652 1 JH Gym 132   652
1) H ELA 113 (633 1640) 1) H Gabria (633 1640) 1) H Gyrn (632 1652) 1) H Gyrn (633 1640) 1) H Gyrn (634 1640) 1) H
1H (abby 3) (643)  1H (329)  1H (329)  1H (329)  1643  1655  1655
JH gym 193 1655
JH Gyrn 153. 1055
14 CO. 1705
THE PARTY OF THE P
1018 HH
133
201 1633
2/2
1: bravo
reception 1631
635
431516511 Cape
4315128 14 601118
4315138 UH +heater

Appendix B: Radon Analytical Results

Jh- 133

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

Pg 1 of 1

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9731135 Result: < 0.3 pCi/l Analysis Note :

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am

Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 14.9% 70°F

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

Pg 1 of 1

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9731120 Result: < 0.3 pCi/l Analysis Note:

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 12:00 pm

Jh-218 Ended: 2021-09-07 at 4:00 pm , Hours/MST%: 100 hours 14.8% 70°F

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

Pg 1 of 1

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9731120 Result: < 0.3 pCi/l Analysis Note:

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 12:00 pm

Jh-218 Ended: 2021-09-07 at 4:00 pm , Hours/MST%: 100 hours 14.8% 70°F

Jh- 329

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

Pg 1 of 1

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9731128 Result:  $0.5 \pm 0.3$  pCi/l Analysis Note :

Location: Analyzed: 2021-09-09 at 3:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 11.7% 70°F

Jh- Stairs 3rd Floor

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

Pg 1 of 1

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

Kit #: 9731124 Result: < 0.3 pCi/l Analysis Note:

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am

Jh- Ela 3rd Floor Ended : 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 16.8% 70°F

Kit #: 9731127 Result: < 0.3 pCi/l Analysis Note:

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 13.0% 70°F

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

Pg 1 of 1

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9731131 Result: < 0.3 pCi/l Analysis Note :

Location: Analyzed: 2021-09-09 at 3:00 pm

Started: 2021-09-03 at 11:00 am

Jh- Hall 118 Ended: 2021-09-07 at 3:00 pm , Hours/MST%: 100 hours 13.1% 70°F

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

Pg 1 of 1

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

Kit #: 9731126 Result: < 0.3 pCi/l Analysis Note:

Location: Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am

Jh- Hall 140 Ended: 2021-09-07 at 3:00 pm , Hours/MST%: 100 hours 13.0% 70°F

September 9, 202	9, 202	mber	Septe
------------------	--------	------	-------

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

Pg 2 of 2

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

Kit #: 9731122

Result: < 0.3 pCi/l

Result: < 0.3 pCi/l

Location:

Jh-Reception

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 4:00 pm

Hours/MST%: 101 hours 9.8% 70°F

Kit #: 9731129

Location:

Jh- Cefeteria D

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 9.7% 70°F

Kit #: 9731130

Result: < 0.3 pCi/l

Location:

Jh- Cefeteria

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 9.8% 70°F

Kit #: 9731132

Location:

Jh- Cafeteria

Result: < 0.3 pCi/l

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 11.0% 70°F

Kit #: 9731133

Result: < 0.3 pCi/l

Location:

Jh- Theater

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 12.3% 70°F

Kit #: 9731136

Result: < 0.3 pCi/l

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 11:00 am Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 100 hours 10.3% 70°F

Location:

Jh- Gym

September 9, 2021

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

Pg 1 of 1

# Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723759

Result: ????

Result: < 0.3 pCi/l

Location:

Jh- Multipurpose 1

Kit #: 9731121 Location:

Jh-Media B

Kit #: 9731134

Result: < 0.3 pCi/l

Location:

Jh- Media Center 1

Analysis Note: MI

Analyzed: 2021-09-09 at 2:00 pm

Started: 0000-00-00 at

Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 0 hours 8.9% 70°F

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 12:00 pm

Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 99 hours 5.2% 70°F

Analysis Note:

Analyzed: 2021-09-09 at 2:00 pm

Started: 2021-09-03 at 12:00 pm

Ended: 2021-09-07 at 3:00 pm

Hours/MST%: 99 hours 13.7% 70°F

				12adon			
Total	Placement Date	12/2/8				Pickup Jeen Pickup Date	
Environmental Concents, Inc.		Tefferson Ho	Houston	15		Email	
Sample #.	Location/ room	SQFT >2000 HVAC Y/N	Window Y/N	Fan Y/N	Time in	Time out	Comment
49731122	, Reception		<b>)</b>	2	N:36		
_	Cafeteria	<b>3</b>	ىد	2	11:35		
97311	Cafeteris D	٠ - د	y,	5	M135		
47	Cateteria	ـد	ر	2	11:35		
17311.	118 HAN 118	g.	3	2	N:39		
1.5	G y Om	ىر	2	S	N:45		
723	6 100	<i>&gt;</i>	5	2	MIUS		
549723759	Multipupped itimM	مر	ۍ	2	MEI		
$\wedge \wedge$	201 Room	>	ۍ	2	N: 29	E E	8
2119781110	218 ROOM	٠	<b>&gt;</b> -	>	11.27		
H973	media center-1	<b>y</b> -	۷.	2	11132		
J4773117D	Media center-D	بر	5-	2	11:32		
JE973 1121	media center-13	<u>ئ</u>	>	Z	11:52		
JH9751125	media center-2	ىو	>	2	11:39		
2378	multi purpose-1	<b>3</b>	X	2	11:51		
1147731123	SF41/5360	7	7		9211		
7		>	7		8211		
721157 PHS	Stairs Sthor	<u></u>	7		1130		on i
2	32.9	<i>&gt;</i>	~		1135		
175113	theater	~	>		1138		
7	33	<i>&gt;</i>	<i>&gt;</i>		141		
149731126	hallite	>	.>-		143		
			-				
						5	
			_	_	_	_	

**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.: 21090801

September 20, 2021

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

Reference: PSS Project No: 21090801

Project Name: ACPS IAQ Testing Project Location: Jefferson Houston

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) **21090801**.

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 October 13, 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.: 21090801

## **Project ID: 4920002**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/08/2021 at 11:11 am

PSS Sample ID	Sample ID	Matrix	Date/Time Collected	
21090801-001	JH-Reception	AIR	09/07/21 19:21	
21090801-002	JH-Hall 116-118	AIR	09/07/21 19:26	
21090801-003	JH-Library	AIR	09/07/21 19:30	
21090801-004	JH-Hall 140	AIR	09/07/21 19:28	
21090801-005	JH-133	AIR	09/07/21 19:32	
21090801-006	JH-Multi Purpose	AIR	09/07/21 19:35	
21090801-007	JH-Gym	AIR	09/07/21 19:41	
21090801-008	JH-Theater	AIR	09/07/21 19:24	
21090801-009	JH-201	AIR	09/07/21 19:38	
21090801-010	JH-218	AIR	09/07/21 19:35	
21090801-011	JH-329	AIR	09/07/21 19:22	
21090801-012	JH-Hall 316	AIR	09/07/21 19:25	
21090801-013	JH-ELA 3rd Floor	AIR	09/07/21 19:27	
21090801-014	JH-Cafe	AIR	09/07/21 19:37	
21090801-015	JH-Outdoor	AIR	09/07/21 19:42	

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

SCIENCE

Project Name: ACPS IAQ Testing

PSS Project No.: 21090801

## 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 17, 2021

Account# 15354 Login# L546137

**Dear Amber Confer:** 

Enclosed are the analytical results for the samples received by our laboratory on September 09, 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. : L546137

## **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





GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sqsqalson.com Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON
Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354

Date Received : 09-SEP-21 Login No. : L546137

Date Analyzed : 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-1 JH-RECEPTION	L546137-2 JH-HALL 116-118	L546137-3 JH-LIBRARY	
Propylene	5.0	<5.0	<5.0	<5.0	
Freon-12	0.80	<0.80	<0.80	<0.80	
Chloromethane	0.80	<0.80	<0.80	<0.80	
Freon-114	0.80	<0.80	<0.80	<0.80	
Vinyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Butadiene	0.80	<0.80	<0.80	<0.80	
n-Butane	0.80	14	5.0	6.7	
Bromomethane	0.80	<0.80	<0.80	<0.80	
Chloroethane	0.80	<0.80	<0.80	<0.80	
Acetonitrile	5.0	<5.0	<5.0	<5.0	
Vinyl Bromide	0.80	<0.80	<0.80	<0.80	
Acrolein	0.80	<0.80	<0.80	2.9	
Acetone	5.0	20	15	40	
Freon-11	0.80	<0.80	<0.80	<0.80	
Isopropyl Alcohol	5.0	44	23	26	
Acrylonitrile	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 6 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-1 JH-RECEPTION	L546137-2 JH-HALL 116-118	L546137-3 JH-LIBRARY	
Pentane	0.80	5.4	8.7	22	
Ethyl Bromide	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethene	0.80	<0.80	<0.80	<0.80	
tert-Butyl Alcohol	5.0	<5.0	<5.0	<5.0	
Methylene Chloride	0.80	<0.80	<0.80	<0.80	
Freon-113	0.80	<0.80	<0.80	<0.80	
Carbon Disulfide	5.0	<5.0	<5.0	<5.0	
Allyl Chloride	0.80	<0.80	<0.80	<0.80	
trans-1,2-Dichloroethene	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl tert-Butyl Ether	0.80	<0.80	<0.80	<0.80	
Vinyl Acetate	0.80	<0.80	<0.80	0.90	
Methyl Ethyl Ketone	0.80	<0.80	<0.80	6.3	
cis-1,2-Dichloroethylene	0.80	<0.80	<0.80	<0.80	
Hexane	0.80	<0.80	<0.80	<0.80	
Ethyl Acetate	0.80	1.1	<0.80	<0.80	

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

Collection Media : Mini Can

Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 7 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-1 JH-RECEPTION	L546137-2 JH-HALL 116-118	L546137-3 JH-LIBRARY	
Chloroform	0.80	<0.80	<0.80	<0.80	
Tetrahydrofuran	0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	0.80	<0.80	<0.80	<0.80	
1,1,1-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Benzene	0.80	<0.80	<0.80	<0.80	
Carbon Tetrachloride	0.80	<0.80	<0.80	<0.80	
Cyclohexane	0.80	<0.80	<0.80	<0.80	
1,2-Dichloropropane	0.80	<0.80	<0.80	<0.80	
Bromodichloromethane	0.80	<0.80	<0.80	<0.80	
1,4-Dioxane	0.80	<0.80	<0.80	<0.80	
Trichloroethylene	0.80	<0.80	<0.80	<0.80	
2,2,4-Trimethylpentane	0.80	<0.80	<0.80	<0.80	
Methyl Methacrylate	0.80	<0.80	<0.80	<0.80	
Heptane	0.80	<0.80	<0.80	<0.80	
cis-1,3-Dichloropropene	0.80	<0.80	<0.80	<0.80	
trans-1,3-Dichloropropen	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Approved by : BLD Submitted by : SAP Date : 17-SEP-21





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-1 JH-RECEPTION	L546137-2 JH-HALL 116-118	L546137-3 JH-LIBRARY	
1,1,2-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl Isobutyl Ketone	0.80	<0.80	<0.80	<0.80	
Toluene	0.80	1.4	<0.80	1.3	
Methyl Butyl Ketone	0.80	<0.80	<0.80	2.6	
Dibromochloromethane	0.80	<0.80	<0.80	<0.80	
1,2-Dibromoethane	0.80	<0.80	<0.80	<0.80	
Tetrachloroethylene	0.80	<0.80	<0.80	<0.80	
Chlorobenzene	0.80	<0.80	<0.80	<0.80	
Ethylbenzene	0.80	<0.80	<0.80	<0.80	
m & p-Xylene	1.6	<1.6	<1.6	<1.6	
Bromoform	0.80	<0.80	<0.80	<0.80	
Styrene	0.80	<0.80	<0.80	<0.80	
1,1,2,2-Tetrachloroethar	n 0.80	<0.80	<0.80	<0.80	
o-Xylene	0.80	<0.80	<0.80	<0.80	
Nonane	0.80	<0.80	<0.80	<0.80	
Cumene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 9 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-1 JH-RECEPTION	L546137-2 JH-HALL 116-118	L546137-3 JH-LIBRARY
2-Chlorotoluene	0.80	<0.80	<0.80	<0.80
n-Propylbenzene	0.80	<0.80	<0.80	<0.80
4-Ethyltoluene	0.80	<0.80	<0.80	<0.80
1,3,5-Trimethylbenzene	0.80	<0.80	<0.80	<0.80
1,2,4-Trimethylbenzene	0.80	<0.80	<0.80	<0.80
Benzyl Chloride	0.80	<0.80	<0.80	<0.80
1,3-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
1,4-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
1,2-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
Naphthalene	0.80	<0.80	<0.80	<0.80

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

Collection Media : Mini Can Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 10 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-4 JH-HALL 140	L546137-5 JH-133	L546137-6 JH-MULTI PURPOSE	
Propylene	5.0	<5.0	<5.0	<5.0	
Freon-12	0.80	<0.80	<0.80	<0.80	
Chloromethane	0.80	<0.80	<0.80	<0.80	
Freon-114	0.80	<0.80	<0.80	<0.80	
Vinyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Butadiene	0.80	<0.80	<0.80	<0.80	
n-Butane	0.80	<0.80	<0.80	1.0	
Bromomethane	0.80	<0.80	<0.80	<0.80	
Chloroethane	0.80	<0.80	<0.80	<0.80	
Acetonitrile	5.0	<5.0	<5.0	<5.0	
Vinyl Bromide	0.80	<0.80	<0.80	<0.80	
Acrolein	0.80	<0.80	<0.80	<0.80	
Acetone	5.0	9.0	6.6	11	
Freon-11	0.80	<0.80	<0.80	<0.80	
Isopropyl Alcohol	5.0	6.2	<5.0	<5.0	
Acrylonitrile	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 11 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-4 JH-HALL 140	L546137-5 JH-133	L546137-6 JH-MULTI PURPOSE	
Pentane	0.80	9.9	2.1	4.7	
Ethyl Bromide	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethene	0.80	<0.80	<0.80	<0.80	
tert-Butyl Alcohol	5.0	<5.0	<5.0	<5.0	
Methylene Chloride	0.80	<0.80	<0.80	<0.80	
Freon-113	0.80	<0.80	<0.80	<0.80	
Carbon Disulfide	5.0	<5.0	<5.0	<5.0	
Allyl Chloride	0.80	<0.80	<0.80	<0.80	
trans-1,2-Dichloroethene	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl tert-Butyl Ether	0.80	<0.80	<0.80	<0.80	
Vinyl Acetate	0.80	<0.80	<0.80	<0.80	
Methyl Ethyl Ketone	0.80	<0.80	<0.80	<0.80	
cis-1,2-Dichloroethylene	0.80	<0.80	<0.80	<0.80	
Hexane	0.80	<0.80	<0.80	<0.80	
Ethyl Acetate	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Submitted by : SAP Approved by : BLD

Date : 17-SEP-21

Page 12 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-4 JH-HALL 140	L546137-5 JH-133	L546137-6 JH-MULTI PURPOSE	
Chloroform	0.80	<0.80	<0.80	<0.80	
Tetrahydrofuran	0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	0.80	<0.80	<0.80	<0.80	
1,1,1-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Benzene	0.80	<0.80	<0.80	<0.80	
Carbon Tetrachloride	0.80	<0.80	<0.80	<0.80	
Cyclohexane	0.80	<0.80	<0.80	<0.80	
1,2-Dichloropropane	0.80	<0.80	<0.80	<0.80	
Bromodichloromethane	0.80	<0.80	<0.80	<0.80	
1,4-Dioxane	0.80	<0.80	<0.80	<0.80	
Trichloroethylene	0.80	<0.80	<0.80	<0.80	
2,2,4-Trimethylpentane	0.80	<0.80	<0.80	<0.80	
Methyl Methacrylate	0.80	<0.80	<0.80	<0.80	
Heptane	0.80	<0.80	<0.80	<0.80	
cis-1,3-Dichloropropene	0.80	<0.80	<0.80	<0.80	
trans-1,3-Dichloropropen	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 13 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-4 JH-HALL 140	L546137-5 JH-133	L546137-6 JH-MULTI PURPOSE	
1,1,2-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl Isobutyl Ketone	0.80	<0.80	<0.80	<0.80	
Toluene	0.80	<0.80	<0.80	1.6	
Methyl Butyl Ketone	0.80	<0.80	<0.80	<0.80	
Dibromochloromethane	0.80	<0.80	<0.80	<0.80	
1,2-Dibromoethane	0.80	<0.80	<0.80	<0.80	
Tetrachloroethylene	0.80	<0.80	<0.80	<0.80	
Chlorobenzene	0.80	<0.80	<0.80	<0.80	
Ethylbenzene	0.80	<0.80	<0.80	<0.80	
m & p-Xylene	1.6	<1.6	<1.6	3.5	
Bromoform	0.80	<0.80	<0.80	<0.80	
Styrene	0.80	<0.80	<0.80	<0.80	
1,1,2,2-Tetrachloroethar	n 0.80	<0.80	<0.80	<0.80	
o-Xylene	0.80	<0.80	<0.80	0.80	
Nonane	0.80	<0.80	<0.80	<0.80	
Cumene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD Date : 17-SEP-21

Page 14 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-4 JH-HALL 140	L546137-5 JH-133	L546137-6 JH-MULTI PURPOSE	
2-Chlorotoluene	0.80	<0.80	<0.80	<0.80	
n-Propylbenzene	0.80	<0.80	<0.80	<0.80	
4-Ethyltoluene	0.80	<0.80	<0.80	<0.80	
1,3,5-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
1,2,4-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
Benzyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,4-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,2-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
Naphthalene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 15 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-7 JH-GYM	L546137-8 JH-THEATER	L546137-9 JH-201	
Propylene	5.0	<5.0	<5.0	<5.0	
Freon-12	0.80	<0.80	<0.80	<0.80	
Chloromethane	0.80	<0.80	<0.80	<0.80	
Freon-114	0.80	<0.80	<0.80	<0.80	
Vinyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Butadiene	0.80	<0.80	<0.80	<0.80	
n-Butane	0.80	<0.80	4.6	2.4	
Bromomethane	0.80	<0.80	<0.80	<0.80	
Chloroethane	0.80	<0.80	<0.80	<0.80	
Acetonitrile	5.0	<5.0	<5.0	<5.0	
Vinyl Bromide	0.80	<0.80	<0.80	<0.80	
Acrolein	0.80	<0.80	<0.80	<0.80	
Acetone	5.0	8.1	15	60	
Freon-11	0.80	<0.80	<0.80	<0.80	
Isopropyl Alcohol	5.0	<5.0	21	47	
Acrylonitrile	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Approved by : BLD

Submitted by : SAP Date : 17-SEP-21

Page 16 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-7 JH-GYM	L546137-8 JH-THEATER	L546137-9 JH-201	
Pentane	0.80	1.4	11	4.3	
Ethyl Bromide	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethene	0.80	<0.80	<0.80	<0.80	
tert-Butyl Alcohol	5.0	<5.0	<5.0	<5.0	
Methylene Chloride	0.80	<0.80	<0.80	<0.80	
Freon-113	0.80	<0.80	<0.80	<0.80	
Carbon Disulfide	5.0	<5.0	<5.0	<5.0	
Allyl Chloride	0.80	<0.80	<0.80	<0.80	
trans-1,2-Dichloroethene	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl tert-Butyl Ether	0.80	<0.80	<0.80	<0.80	
Vinyl Acetate	0.80	<0.80	<0.80	<0.80	
Methyl Ethyl Ketone	0.80	<0.80	<0.80	2.9	
cis-1,2-Dichloroethylene	0.80	<0.80	<0.80	<0.80	
Hexane	0.80	<0.80	<0.80	<0.80	
Ethyl Acetate	0.80	<0.80	<0.80	1.1	

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

Collection Media : Mini Can

Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 17 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-7 JH-GYM	L546137-8 JH-THEATER	L546137-9 JH-201	
Chloroform	0.80	<0.80	<0.80	<0.80	
Tetrahydrofuran	0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	0.80	<0.80	<0.80	<0.80	
1,1,1-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Benzene	0.80	<0.80	<0.80	<0.80	
Carbon Tetrachloride	0.80	<0.80	<0.80	<0.80	
Cyclohexane	0.80	<0.80	<0.80	<0.80	
1,2-Dichloropropane	0.80	<0.80	<0.80	<0.80	
Bromodichloromethane	0.80	<0.80	<0.80	<0.80	
1,4-Dioxane	0.80	<0.80	<0.80	<0.80	
Trichloroethylene	0.80	<0.80	<0.80	<0.80	
2,2,4-Trimethylpentane	0.80	<0.80	<0.80	<0.80	
Methyl Methacrylate	0.80	<0.80	<0.80	<0.80	
Heptane	0.80	<0.80	<0.80	<0.80	
cis-1,3-Dichloropropene	0.80	<0.80	<0.80	<0.80	
trans-1,3-Dichloropropen	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 18 of 40

Version 1.000





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID:	LOQ	L546137-7	L546137-8	L546137-9	
Client ID:	ppbv	JH-GYM	JH-THEATER	JH-201	
1,1,2-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl Isobutyl Ketone	0.80	<0.80	<0.80	<0.80	
Toluene	0.80	<0.80	2.4	<0.80	
Methyl Butyl Ketone	0.80	<0.80	<0.80	<0.80	
Dibromochloromethane	0.80	<0.80	<0.80	<0.80	
1,2-Dibromoethane	0.80	<0.80	<0.80	<0.80	
Tetrachloroethylene	0.80	<0.80	<0.80	<0.80	
Chlorobenzene	0.80	<0.80	<0.80	<0.80	
Ethylbenzene	0.80	<0.80	<0.80	<0.80	
m & p-Xylene	1.6	<1.6	<1.6	<1.6	
Bromoform	0.80	<0.80	<0.80	<0.80	
Styrene	0.80	<0.80	<0.80	<0.80	
1,1,2,2-Tetrachloroethan	0.80	<0.80	<0.80	<0.80	
o-Xylene	0.80	<0.80	<0.80	<0.80	
Nonane	0.80	<0.80	<0.80	<0.80	
Cumene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 19 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ	L546137-7 JH-GYM	L546137-8 JH-THEATER	L546137-9 JH-201	
CITER ID:	ppbv	UH-GIM	UH-IHEAIER	UH-2UI	
2-Chlorotoluene	0.80	<0.80	<0.80	<0.80	
n-Propylbenzene	0.80	<0.80	<0.80	<0.80	
4-Ethyltoluene	0.80	<0.80	<0.80	<0.80	
1,3,5-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
1,2,4-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
Benzyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,4-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,2-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
Naphthalene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 20 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-10 JH-218	L546137-11 JH-329	L546137-12 JH-HALL 316	
Propylene	5.0	<5.0	<5.0	<5.0	
Freon-12	0.80	<0.80	<0.80	<0.80	
Chloromethane	0.80	<0.80	<0.80	<0.80	
Freon-114	0.80	<0.80	<0.80	<0.80	
Vinyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Butadiene	0.80	<0.80	<0.80	<0.80	
n-Butane	0.80	9.2	32	4.0	
Bromomethane	0.80	<0.80	<0.80	<0.80	
Chloroethane	0.80	<0.80	<0.80	<0.80	
Acetonitrile	5.0	<5.0	<5.0	<5.0	
Vinyl Bromide	0.80	<0.80	<0.80	<0.80	
Acrolein	0.80	<0.80	<0.80	<0.80	
Acetone	5.0	13	14	9.5	
Freon-11	0.80	<0.80	<0.80	<0.80	
Isopropyl Alcohol	5.0	48	46	24	
Acrylonitrile	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Approved by : BLD

Submitted by : SAP Date : 17-SEP-21

Page 21 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-10 JH-218	L546137-11 JH-329	L546137-12 JH-HALL 316	
Pentane	0.80	9.3	18	6.3	
Ethyl Bromide	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethene	0.80	<0.80	<0.80	<0.80	
tert-Butyl Alcohol	5.0	<5.0	<5.0	<5.0	
Methylene Chloride	0.80	<0.80	<0.80	<0.80	
Freon-113	0.80	<0.80	<0.80	<0.80	
Carbon Disulfide	5.0	<5.0	<5.0	<5.0	
Allyl Chloride	0.80	<0.80	<0.80	<0.80	
trans-1,2-Dichloroethene	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl tert-Butyl Ether	0.80	<0.80	<0.80	<0.80	
Vinyl Acetate	0.80	<0.80	<0.80	<0.80	
Methyl Ethyl Ketone	0.80	<0.80	<0.80	<0.80	
cis-1,2-Dichloroethylene	0.80	<0.80	<0.80	<0.80	
Hexane	0.80	<0.80	<0.80	<0.80	
Ethyl Acetate	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 22 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-10 JH-218	L546137-11 JH-329	L546137-12 JH-HALL 316	
Chloroform	0.80	<0.80	<0.80	<0.80	
Tetrahydrofuran	0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	0.80	<0.80	<0.80	<0.80	
1,1,1-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Benzene	0.80	<0.80	<0.80	<0.80	
Carbon Tetrachloride	0.80	<0.80	<0.80	<0.80	
Cyclohexane	0.80	<0.80	<0.80	<0.80	
1,2-Dichloropropane	0.80	<0.80	<0.80	<0.80	
Bromodichloromethane	0.80	<0.80	<0.80	<0.80	
1,4-Dioxane	0.80	<0.80	<0.80	<0.80	
Trichloroethylene	0.80	<0.80	<0.80	<0.80	
2,2,4-Trimethylpentane	0.80	<0.80	<0.80	<0.80	
Methyl Methacrylate	0.80	<0.80	<0.80	<0.80	
Heptane	0.80	<0.80	<0.80	<0.80	
cis-1,3-Dichloropropene	0.80	<0.80	<0.80	<0.80	
trans-1,3-Dichloropropen	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21

Page 23 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 : ppbv Units

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-10 JH-218	L546137-11 JH-329	L546137-12 JH-HALL 316	
1,1,2-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl Isobutyl Ketone	0.80	<0.80	<0.80	<0.80	
Toluene	0.80	<0.80	<0.80	0.80	
Methyl Butyl Ketone	0.80	<0.80	<0.80	<0.80	
Dibromochloromethane	0.80	<0.80	<0.80	<0.80	
1,2-Dibromoethane	0.80	<0.80	<0.80	<0.80	
Tetrachloroethylene	0.80	<0.80	<0.80	<0.80	
Chlorobenzene	0.80	<0.80	<0.80	<0.80	
Ethylbenzene	0.80	<0.80	<0.80	<0.80	
m & p-Xylene	1.6	<1.6	<1.6	<1.6	
Bromoform	0.80	<0.80	<0.80	<0.80	
Styrene	0.80	<0.80	<0.80	<0.80	
1,1,2,2-Tetrachloroethan	0.80	<0.80	<0.80	<0.80	
o-Xylene	0.80	<0.80	<0.80	<0.80	
Nonane	0.80	<0.80	<0.80	<0.80	
Cumene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Submitted by : SAP Approved by : BLD

Date : 17-SEP-21

Page 24 of 40

Version 1.000





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-10 JH-218	L546137-11 JH-329	L546137-12 JH-HALL 316	
2-Chlorotoluene	0.80	<0.80	<0.80	<0.80	
n-Propylbenzene	0.80	<0.80	<0.80	<0.80	
4-Ethyltoluene	0.80	<0.80	<0.80	<0.80	
1,3,5-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
1,2,4-Trimethylbenzene	0.80	<0.80	<0.80	<0.80	
Benzyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,4-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
1,2-Dichlorobenzene	0.80	<0.80	<0.80	<0.80	
Naphthalene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 25 of 40

Version 1.000



Supervisor: BLD



## LABORATORY ANALYSIS REPORT

6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-13 JH-ELA 3RD FLOOR	L546137-14 JH-CAFE	L546137-15 JH-OUTDOOR	
Propylene	5.0	<5.0	<5.0	<5.0	
Freon-12	0.80	<0.80	<0.80	<0.80	
Chloromethane	0.80	<0.80	<0.80	<0.80	
Freon-114	0.80	<0.80	<0.80	<0.80	
Vinyl Chloride	0.80	<0.80	<0.80	<0.80	
1,3-Butadiene	0.80	<0.80	<0.80	<0.80	
n-Butane	0.80	0.80	4.1	<0.80	
Bromomethane	0.80	<0.80	<0.80	<0.80	
Chloroethane	0.80	<0.80	<0.80	<0.80	
Acetonitrile	5.0	<5.0	<5.0	<5.0	
Vinyl Bromide	0.80	<0.80	<0.80	<0.80	
Acrolein	0.80	<0.80	<0.80	<0.80	
Acetone	5.0	7.3	15	5.2	
Freon-11	0.80	<0.80	<0.80	<0.80	
Isopropyl Alcohol	5.0	17	34	<5.0	
Acrylonitrile	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD

Date : 17-SEP-21





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID:	LOQ	L546137-13	L546137-14	L546137-15	
Client ID:	ppbv	JH-ELA 3RD FLOOR	JH-CAFE	JH-OUTDOOR	
Pentane	0.80	3.3	6.4	<0.80	
Ethyl Bromide	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethene	0.80	<0.80	<0.80	<0.80	
tert-Butyl Alcohol	5.0	<5.0	<5.0	<5.0	
Methylene Chloride	0.80	<0.80	<0.80	<0.80	
Freon-113	0.80	<0.80	<0.80	<0.80	
Carbon Disulfide	5.0	<5.0	<5.0	<5.0	
Allyl Chloride	0.80	<0.80	<0.80	<0.80	
trans-1,2-Dichloroethene	0.80	<0.80	<0.80	<0.80	
1,1-Dichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl tert-Butyl Ether	0.80	<0.80	<0.80	<0.80	
Vinyl Acetate	0.80	<0.80	<0.80	<0.80	
Methyl Ethyl Ketone	0.80	<0.80	<0.80	<0.80	
cis-1,2-Dichloroethylene	0.80	<0.80	<0.80	<0.80	
Hexane	0.80	<0.80	<0.80	<0.80	
Ethyl Acetate	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Submitted by : SAP Approved by : BLD

Date : 17-SEP-21

Page 27 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Date Received : 09-SEP-21 Login No. : L546137 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID: Client ID:	LOQ ppbv	L546137-13 JH-ELA 3RD FLOOR	L546137-14 JH-CAFE	L546137-15 JH-OUTDOOR	
Chloroform	0.80	<0.80	<0.80	<0.80	
Tetrahydrofuran	0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	0.80	<0.80	<0.80	<0.80	
1,1,1-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Benzene	0.80	<0.80	<0.80	<0.80	
Carbon Tetrachloride	0.80	<0.80	<0.80	<0.80	
Cyclohexane	0.80	<0.80	<0.80	<0.80	
1,2-Dichloropropane	0.80	<0.80	<0.80	<0.80	
Bromodichloromethane	0.80	<0.80	<0.80	<0.80	
1,4-Dioxane	0.80	<0.80	<0.80	<0.80	
Trichloroethylene	0.80	<0.80	<0.80	<0.80	
2,2,4-Trimethylpentane	0.80	<0.80	<0.80	<0.80	
Methyl Methacrylate	0.80	<0.80	<0.80	<0.80	
Heptane	0.80	<0.80	<0.80	<0.80	
cis-1,3-Dichloropropene	0.80	<0.80	<0.80	<0.80	
trans-1,3-Dichloropropen	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can

Submitted by : SAP Approved by : BLD

Date : 17-SEP-21

Page 28 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID:	LOQ	L546137-13	L546137-14	L546137-15	
Client ID:	ppbv	JH-ELA 3RD FLOOR	JH-CAFE	JH-OUTDOOR	
1,1,2-Trichloroethane	0.80	<0.80	<0.80	<0.80	
Methyl Isobutyl Ketone	0.80	<0.80	<0.80	<0.80	
Toluene	0.80	0.90	2.5	<0.80	
Methyl Butyl Ketone	0.80	<0.80	<0.80	<0.80	
Dibromochloromethane	0.80	<0.80	<0.80	<0.80	
1,2-Dibromoethane	0.80	<0.80	<0.80	<0.80	
Tetrachloroethylene	0.80	<0.80	<0.80	<0.80	
Chlorobenzene	0.80	<0.80	<0.80	<0.80	
Ethylbenzene	0.80	<0.80	<0.80	<0.80	
m & p-Xylene	1.6	<1.6	<1.6	<1.6	
Bromoform	0.80	<0.80	<0.80	<0.80	
Styrene	0.80	<0.80	<0.80	<0.80	
1,1,2,2-Tetrachloroethan	0.80	<0.80	<0.80	<0.80	
o-Xylene	0.80	<0.80	<0.80	<0.80	
Nonane	0.80	<0.80	<0.80	<0.80	
Cumene	0.80	<0.80	<0.80	<0.80	

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

Collection Media : Mini Can Submitted by : SAP

Approved by : BLD Date : 17-SEP-21

Page 29 of 40





6601 Kirkville Road East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sgsgalson.com

Client : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled : 07-SEP-21 Account No.: 15354 Login No. : L546137 Date Received : 09-SEP-21 Date Analyzed: 16-SEP-21 - 17-SEP-21 Units : ppbv

Report ID : 1265374

Galson ID:	LOQ	L546137-13	L546137-14	L546137-15
Client ID:	ppbv	JH-ELA 3RD FLOOR	JH-CAFE	JH-OUTDOOR
2-Chlorotoluene	0.80	<0.80	<0.80	<0.80
n-Propylbenzene	0.80	<0.80	<0.80	<0.80
4-Ethyltoluene	0.80	<0.80	<0.80	<0.80
1,3,5-Trimethylbenzene	0.80	<0.80	<0.80	<0.80
1,2,4-Trimethylbenzene	0.80	<0.80	<0.80	<0.80
Benzyl Chloride	0.80	<0.80	<0.80	<0.80
1,3-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
1,4-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
1,2-Dichlorobenzene	0.80	<0.80	<0.80	<0.80
Naphthalene	0.80	<0.80	<0.80	<0.80

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

Collection Media : Mini Can Approved by : BLD Submitted by : SAP Date : 17-SEP-21

Page 30 of 40





Client Name : Phase Separation Science, Inc.

: JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled: 07-SEP-21 Account No.: 15354 Date Received: 09-SEP-21 Login No. : L546137

Date Analyzed: 16-SEP-21 - 17-SEP-21

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

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

L546137 (Report ID: 1265374):

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)

L546137-3,6,8,13-14 (Report ID: 1265374):

Sample canisters were received at/near ambient pressure.

L546137 (Report ID: 1265374):

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%
2-Chlorotoluene	+/-13.1%	105%
4-Ethyltoluene	+/-14%	106%
Acrolein	+/-21.8%	93.1%
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%





6601 Kirkville Road East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

(315) 432-5227

Client Name : Phase Separation Science, Inc.

: JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled: 07-SEP-21 Account No.: 15354 Date Received: 09-SEP-21 Login No. : L546137

+/-13.8%

+/-13.7%

+/-17.1%

Date Analyzed: 16-SEP-21 - 17-SEP-21

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%	103%
Methyl tert-Butyl Ether	+/-14.6%	102%
Naphthalene	+/-20.2%	111%
Hexane	+/-15.2%	100%
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%
	/ 10 00	

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Vinyl Acetate

101%

106%

102%





6601 Kirkville Road East Syracuse, NY 13057

FAX: (315) 437-0571

www.sgsgalson.com

(315) 432-5227

Client Name : Phase Separation Science, Inc.

: JEFFERSON HOUSTON Project No. : CITY OF ALEXANDRIA

Date Sampled: 07-SEP-21 Account No.: 15354 Date Received: 09-SEP-21 Login No. : L546137

Date Analyzed: 16-SEP-21 - 17-SEP-21

Vinyl Bromide +/-14.5% 102% Vinyl Chloride +/-15.2% 100%

1Z2313E40165226029 Date: 09/09/21 Shipper: UPS Report To\*: Phase Separation Science Invoice To\*: Phase Separation Science New Client? Initials: MAK 6630 Baltimore National Pike Baltimore, MD 21228 Client Account No.\*: 4546137 Phone No.: 410-747-8770 Phone No.\*: 410-747-8770 Cell No.: Email: invoicing@phaseonline.com 888-432-LABS (5227) P.O. No. : Email Results to : Amber Confer www.sgsgalson.com Credit Card : Card on File Email address: reporting@phaseonline.com Call for Credit Card Info. Samples submitted using the FreePumpLoan™ Program Samples submitted using the FreeSamplingBadges™ Program Need Results By: (surcharge) Project: City of Alexandria 1 Site Name: Jefferson Houston Sampled by: Client 0% Standard 35% 4 Business Days Comments: 3 Business Days 50% wire cart 2 Business Davs 75% Please indicate which OEL this data will be used for : List description of industry or Process/interferences present in sampling area: State samples were Next Day by 6pm 100% collected in (e.g., NY) OSHA PEL ACGIH TLV Cal OSHA Next Day by Noon 150% VA ☐ MSHA Other (specify): Same Day 200% Sample Volume Hexavalent Chromium Sample Units\*: Sample Identification\* Method Reference<sup>4</sup> Sample Time Analysis Requested\* Date Sampled Process (e.g., welding L, ml,min,in2,cm2,ft2 (Maxmium of 20 Characters) Sample Area\* plating, painting, etc.}\* ug/m^3 1L VOC TO-15 (list) 09/07/21 Canister JH-Reception 09/07/21 1L ug/m^3 VOC TO-15 (list) Canister JH-Hall 116-118 1L VOC JH-Library 09/07/21 Canister  $ug/m^3$ TO-15 (list) 09/07/21 Canister 1L ug/m^3 VOC TO-15 (list) JH-Hall 140 09/07/21 1L ua/m^3 VOC TO-15 (list) JH-133 Canister **1**L VOC JH-Multi Purpose 09/07/21 Canister ug/m^3 TO-15 (list) 09/07/21 Canister **1**L ug/m^3 VOC TO-15 (list) JH- Gym 1L TO-15 (list) JH- Theater 09/07/21 Canister ug/m^3 VOC 1L ua/m^3 VOC TO-15 (list) JH- 201 09/07/21 Canister VOC 09/07/21 ug/m^3 TO-15 (list) JH-218 Canister 1L JH-329 09/07/21 Canister 1L ug/m^3 VOC TO-15 (list) \*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

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

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

Chain of Custody

Print Name/Signature

Date

Time

Received by:

Re

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

\* Required fields of failure to complete these fields may result in a delaying your samples being processed.

Page of 2

	200		New Client	Report To* : Pha	ase Separation So	cience	Invoice T	∘*⊹Phase S	eparation Scie	ence
ì	<b>5</b> 65	GALSON	·	663	30 Baltimore Natio					
			Client Account	No.*: Bai	timore, MD 21228	3				
	6601 Kirk	ille Rd	<del> </del>							
	East Syra	cuse, NY 13057		Phone No.* : 41(	0-747-8770		<del></del>	lo.: <u>410-747-87</u>		
	Tel: (315) 888-4	432-5227 32-LABS (5227)		Cell No. :			Ema	<sup>ail</sup> : <u>invoicing@</u>	phaseonline.com	
			Į.	Email Results to : <u>Am</u>	ber Confer		P.O. N			
	www.sgs	galson.com		Email address <u>: rep</u>	orting@phaseonlir	ne.com	Credit Ca	rd : Card on Fi	le Call for Cred	dit Card Info.
					Samples submitted usir	on the FreePumni nan™	Program Samples s	submitted using th	e FreeSamplingBadge	s™ Program
	Need Results By:	(surcharge)	·		·					
Z	Standard	0%	Site Name: Jeffers	son Houston	Pro	pject: City of Alexa	ndria Samı	pled by: Client		· · · · · · · · · · · · · · · · ·
	4 Business Days	35%	Comments:						•	
3 Business Days 50%										
	2 Business Days	75%		<del></del>				1	· · · · · · · · · · · · · · · · · · ·	<del>.</del>
	Standard   0%   Site Name : Jefferson House				rences present in sampl	ing area:	State samples were collected in (e.g., NY)	l	hich OEL this data wil	l be used for :
							VA	MSHA	Other (specify):	car osna
	Same Day	200%		<del></del> -	I a	ı	VA	I WISHA	Other (specify).	Hexavalent Chromium
•		4	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requ	ested*	Method Reference^	Process (e.g., welding plating, painting, etc.)*
JH-Hall 316			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
JH-	ELA 3rd Floor		09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
JH-	Cafe		09/07/21	Canister	1L	ug/m^3	voc	-	TO-15 (list)	
JH-	Outdoor		09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
	·		09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	·
			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
	<u> </u>		09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
			09/07/21	Canister	1L	ug/m^3	voc		TO-15 (list)	
^Ga	alson Laboratories v	vill subsititute our	routine/preferred met	hod if it does not match	the method listed on th	e COC unless this box i	s checked: 🚺 Use method(	s) listed on COC		
For	metals analysis: if r	equesting an analy	te with the option of	a lower LOQ, please ind	icate if the lower LOQ is	required (only availabl	e for certain analytes - see SA	AG):		
For	crystalline silica: fo	rm(s) of silica need	led must be indicated	(Quartz, Cristobalite, ar	nd/or Tridymitë)* :			· · · · · · · · · · · · · · · · · · ·		
Cha	in of Custody	Pri	nt Name/Signature		Date Time		Print Nam	ne/Signature	_ Da	te Time
Reli	nquished by :	anter !	o win	98	121	Received by :				/
Reli	nquished by :	V				Received by :	Michelle Krause	2 Muchelle	transe 919	12 1098
			* F				s next day's business delayin your samples be	ષ્ટ ing processed.	j F	Page 2 of 2

Phono Concretion Co	ionas Inc	<del></del> · · · ·				Samp	oles Transferred To:				
hase Separation Sc 630 Baltimore Nati			W.C	). No. :	21090801	SGS	North America - NY	Y			
Baltimore, MD 2122	28		Proj	ect Location	Jefferson Houston		6601 Kirkville Road East Syracuse, NY 13057				
hone: (410) 747-87			Proj	ect Number:	4920002	East					
ax: (410) 788-8723	•		Report To LOD: No				Old SGS Galson Labs. bsc Phone:				
or Questions or	issues please contact: A	mber Confer		Report D	ue On :09/16/21 05:00	Thon	315-432-5227				
Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative			
21090801-001	JH-Reception	09/07/21	19:21	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-002	JH-Hall 116-118	09/07/21	19:26	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-003	JH-Library	09/07/21	19:30	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-004	JH-Hall 140	09/07/21	19:28	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-005	JH-133	09/07/21	19:32	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-006	JH-Multi Purpose	09/07/21	19:35	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-007	JH-Gym	09/07/21	19:41	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-008	JH-Theater	09/07/21	19:24	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-009	JH-201	09/07/21	19:38	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-010	JH-218	09/07/21	19:35	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-011	JH-329	09/07/21	19:22	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-012	JH-Hall 316	09/07/21	19:25	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-013	JH-ELA 3rd Floor	09/07/21	19:27	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-014	JH-Cafe	09/07/21	19:37	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
21090801-015	JH-Outdoor	09/07/21	19:42	Air	VOCs in Air by GC/MS (subbed)	TO-15	NONSC	NON			
end Repor	rables Required t Attn: reporting@	phaseonline.co	<u>m</u>		Perform Q.C. Send 1	-	invoicing@phaseo	nline.com			
		arrier:	ir S	<del></del>							
ondition Upon Rec	ceipt :			_							
mments:	,	2 box	2\$								
mples Relinquish	ed By: Out	200ate: 99	21_ T	ime:	Samples Received By :						
mples Relinquishe	ed By:	Date :	· 	Гіте :	Samples Received By:		54	9			
mples Relinquishe	ed Bv:	Date: Pa	age 33 of 3	3 <sub>me</sub> :Report	Reference:1 Gen Mated:17-SEP-	21 16:50 1956 Might 100 1	y 9	May 105			



#### **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.: 21090801

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 take upon receipt. Pressures will be taken by subcontractor.

21090801: 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.

# TAURONMENTAL SCHOOL

## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15**

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com email: info@phaseonline.com

1	Total Environmental Concepts, Inc. *OFFICE LOC.: Lorton							PSS Work Order #: PAGE 1 OF 2									
		<sub>CT MGR:</sub> Karl Ford					21090801										
EMAIL: kford@teci.pro *PHONE NO: (703) 567-4346																	
*PROJECT NAME: ACPS IAQ testing PROJECT NO.: 4920002							* ③		*	* +	ъ е *	er .ab	ab *	۸ir *			
	SITE LO	CATION: Jefferson Hou	ston	P.O. NO.:					g. ID	er Pressure ("Hg) Start	ressul g) Sto	Saníst "Hg) L	Subsl	bient,	List	#	
		:R(S): Margaret, Vict					* _		Sample Reg. ID	Canister Pressure in field ("Hg) Start	Canister Pressure * in field ("Hg) Stop	Incoming Caníster Pressure ("Hg) Lab	Soil Gas / Subslab	ndoor/Ambient Air	TO-15 Full List	Special List	
2	LAB#	*SAMPLE IDENTIFICATION	*DATE START	*Time Start (24hr clock)	*DATE STOP	*Time Stop (24hr clock)	Can ID		Sam	Caniste in field	Cani in fie	Incol	Soil	opul	TO-`	Spec	REMARKS
		JH - Reception	9/7/21	15:10	9/7/21	19:21	1377	11	04476	30+	5				/		
	2	JH - Hall 11b - 11B	9/7/21	15:27	9/7/21	19:26	00252	2	00252	40	10				/		
	3	JH - Library	9/7/21	15:36	9/7/21	19:30	1393	arv	04464	30+	4				~		
ı	9	JH - Hall 140	9/7/21	15:20	9/7/21	19:28	1376		10138	30	4				~		
	٢	JH - 133	9/7/21	15:24	9/7/21	19:32	00334	4	04388	30+	1				/		
	Č	JH - Multi Purpose	9/7/21	15:30	9/7/21	19:35	01219	9	10736	30+	9				~		
	7	JH - Gym	9/7/21	15:34	9/7/21	19:41	0038	7	06819	30+	4				~		
	y	JH - Theater	9/7/21	15:11	9/7/21	19:24	1341		64323	27	1				1		
	9	JH - 201	9/7/21	15:53	9/7/21	19:38	1514		04305	30	5				1		
	iò	JH - 218	9/7/21	15:47	9/7/21	19:35	00333	3	WR326	30+	5				<b>'</b>		
5		ished By: (1)	Date	Time	Received By:	111		4	*Reque	sted TA1	(One TA	AT per CO	C) 2-Da	v			Carrier:
		ning Jackson	9/7/21	20:30	ded	01/			Next D		Emerg	ency	Othe	•		۱۱ر	cit
	Relinquished By: (2)		Date 9/8/21	Time	Received By:	4/2	-	_Dat	a Deliverable	es Requi	red:						
	Relinqu	ished By: (3)	Date	Time	Received By:			Spe	ecial Instruct	ions:							
	Relinqu	ished By: (4)	Date	Time	Received By:												

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement 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. \* = REQUIRED

## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15**

### PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com email: info@phaseonline.com

1	*CLIENT	Total Environmental Concep	ots, Inc. *OFFI	CE LOC.: LO	rton		PSS Work Order #:  21090801				PAGE 2 OF 2					
	*PROJE	CT MGR: Karl Ford					7									
		kford@teci.pro		*PHONE NO: (	703) 567-4	1346										
	*PROJECT NAME: ACPS IAQ testing PROJECT NO.: 4920002						* ③	*	* #	* &	er -ab	ab *	Air *			
	Jefferson Houston  SITE LOCATION:  P.O. NO.:							Gl .ge	ressu g) Sta	ressu g) Sto	Canist "Hg) I	Subs	bient	l List	<b>1</b> 5	
-	SAMPLER(S): Margaret, Victoria, Channing					Can ID *	Sample Reg. ID	Canister Pressure * in field ("Hg) Start	Canister Pressure * in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab	Indoor/Ambient Air *	TO-15 Full List	Special List		
2	LAB#	*DATE *Time Start *DATE *Time Stop		Car	San	Car in fi	Car in fi	Inco	Soil	lud	Ė	Spe	REMARKS			
	()	JH - 329	9/7/21	15:14	9/7/21	19:22	965	11470	29	7	5			~		
	لم	JH - Hall 316	9/7/21	15:20	9/7/21	19:25	1498	10721	30+	7				~		
	13	JH - ELA 3rd Floor	9/7/21	15:25	9/7/21	19:27	WA602	2 WR512	30	0				~		
	14	JH - Cafe	9/7/21	15:35	9/7/21	19:37	WA058	3 4631	30+	4				<b>V</b>		
I	15	JH - Outdoor	9/7/21	15:41	9/7/21	19:42	WA943	6051	30+	9				<b>V</b>		
													-			
I													Ш			
I																
5		ished By: (1)	Date	Time	Received By:	1		*Reque	sted TA	(One T	AT per CC	(C) 2-Da	v			Carrier:
		ning Jackson	9/7/21	8:30	Jed-			Next I		Emerg		Othe	-		111	al
	1	ished By: (2)	Date 9/8/21	Time	Received By	//	_	Data Deliverab	les Requ	ired:						
ŀ	Relingu	ished By: (3)	Date	Time	Received By:			Special Instruc	tions:							
1	Relinqu	ished By: (4)	Date	Time	Received By:											

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement 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. \* = REQUIRED



#### **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.: 21090801

Client Name Total Environmental Concepts - Lorto Received By Thomas Wingate

**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 Margaret, Victoria, Channing

COC agrees with sample labels? Yes MD DW Cert. No. N/A

Chain of Custody Yes

Sample Container Custody Seal(s) Intact? Not Applicable

Appropriate for Specified Analysis?

Yes
Intact?

Yes
Seal(s) Signed / Dated Not Applicable
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 N/A (pH<2)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.

Soil gas/indoor	air not indicated	on COC: same	ples are indoor air.
Gon gao, inacon			

Incoming pressures not take upon receipt. Pressures will be taken by subcontractor.

Samples Inspected/Checklist Completed By:	Outer of longer	Date: 09/08/2021
	Amber Confer	

PM Review and Approval: Date: 09/08/2021

LyriPhadopeci4Soonf 40

Version 1.000



Relinquished By: (3)

Relinquished By: (4)

Date

Date

Time

Time

## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15**

PHASE SEPARATION SCIENCE, INC. www.phaseonline.com email: info@phaseonline.com

Data Deliverables Required:

**Special Instructions:** 

#### PSS Work Order #: PAGE OF \*CLIENT: \*OFFICE LOC.: \*PROJECT MGR: EMAIL: \*PHONE NO: ( \* (3) Canister Pressure \* in field ("Hg) Stop Incoming Canister Pressure ("Hg) Lab Indoor/Ambient Air Soil Gas / Subslab PROJECT NO .: Canister Pressure in field ("Hg) Start \*PROJECT NAME: Sample Reg. ID TO-15 Full List SITE LOCATION: P.O. NO.: Special List SAMPLER(S): \*DATE \*Time Start \*DATE \*Time Stop REMARKS LAB# \*SAMPLE IDENTIFICATION START (24hr clock) STOP (24hr clock) Relinquished By: (1) Date \*Requested TAT (One TAT per COC) Shipping Carrier: Time Received By: (4) 5-Day ☐ 3-Dav ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other Relinquished By: (2) Date Time Received By:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Received By:

Received By:



Relinquished By: (3)

Relinquished By: (4)

Date

Date

Time

Time

## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15**

PHASE SEPARATION SCIENCE, INC. www.phaseonline.com email: info@phaseonline.com

Data Deliverables Required:

**Special Instructions:** 

#### PSS Work Order #: PAGE OF \*CLIENT: \*OFFICE LOC.: \*PROJECT MGR: EMAIL: \*PHONE NO: ( \* (3) Canister Pressure \* in field ("Hg) Stop Incoming Canister Pressure ("Hg) Lab Indoor/Ambient Air Soil Gas / Subslab PROJECT NO .: Canister Pressure in field ("Hg) Start \*PROJECT NAME: Sample Reg. ID TO-15 Full List SITE LOCATION: P.O. NO.: Special List SAMPLER(S): \*DATE \*Time Start \*DATE \*Time Stop REMARKS LAB# \*SAMPLE IDENTIFICATION START (24hr clock) STOP (24hr clock) Relinquished By: (1) Date \*Requested TAT (One TAT per COC) Shipping Carrier: Time Received By: (4) 5-Day ☐ 3-Dav ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other Relinquished By: (2) Date Time Received By:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Received By:

Received By:

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.: 21091317

September 21, 2021

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

Reference: PSS Project No: 21091317

Project Name: ACPS IAQ Testing Project Location: Jefferson Houston

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) **21091317**.

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 October 18, 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.: 21091317

#### **Project ID: 4920002**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/13/2021 at 12:42 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21091317-001	JH- Reception	AIR	09/08/21 00:00
21091317-002	JH- Hall 116-118	AIR	09/08/21 00:00
21091317-003	JH- Library	AIR	09/08/21 00:00
21091317-004	JH- Theater	AIR	09/08/21 00:00
21091317-005	JH- Hall 140	AIR	09/08/21 00:00
21091317-006	JH- 133	AIR	09/08/21 00:00
21091317-007	JH- Multi Purpose	AIR	09/08/21 00:00
21091317-008	JH- Gym	AIR	09/08/21 00:00
21091317-009	JH- Cafe	AIR	09/08/21 00:00
21091317-010	JH- 201	AIR	09/08/21 00:00
21091317-011	JH- 218	AIR	09/08/21 00:00
21091317-012	JH- 329	AIR	09/08/21 00:00
21091317-013	JH- Hall 316	AIR	09/08/21 00:00
21091317-014	JH- ELA 3rd Floor	AIR	09/08/21 00:00
21091317-015	JH- Exit Stair 300	AIR	09/08/21 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.: 21091317

#### 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 21, 2021

Account# 15354 Login# L546491

Dear Amber Confer:

Enclosed are the analytical results for the samples received by our laboratory on September 14, 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. : L546491

#### **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



#### LABORATORY ANALYSIS REPORT

## GALSON

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sqsqalson.com Client : Phase Separation Science, Inc. Account No.: 15354

Site : JEFFERSON HOUSTON

Project No. : ACPS IAQ TESTING - 4920002

Date Sampled : 08-SEP-21 Date Received : 14-SEP-21

Report ID : 1265197

#### Formaldehyde

		Time	Total	Conc	
Sample ID	<u>Lab ID</u>	minutes	uq	$_{\rm mg/m3}$	mqq
JH - RECEPTION	L546491-1	251	<0.4	<0.01	<0.01
JH - HALL 116-118	L546491-2	239	<0.4	<0.01	<0.01
JH - LIBRARY	L546491-3	234	<0.4	<0.01	<0.01
JH - THEATER	L546491-4	253	<0.4	<0.01	<0.01
JH - HALL 140	L546491-5	248	<0.4	<0.01	<0.01
JH - 133	L546491-6	248	<0.4	<0.01	<0.01
JH - MULTI PURPOSE	L546491-7	245	<0.4	<0.01	<0.01
JH - GYM	L546491-8	247	<0.4	<0.01	<0.01
JH - CAFE	L546491-9	242	<0.4	<0.01	<0.01
JH - 201	L546491-10	222	<0.4	<0.02	<0.01
ЈН - 218	L546491-11	231	<0.4	<0.01	<0.01
ЈН - 329	L546491-12	248	<0.4	<0.01	<0.01
JH - HALL 316	L546491-13	245	<0.4	<0.01	<0.01
JH - ELA 3RD FLOOR	L546491-14	242	<0.4	<0.01	<0.01
JH - EXIT STAIR 300	L546491-15	240	<0.4	<0.01	<0.01

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

Level of Quantitation: 0.4 ug Submitted by: JLL Approved by: NKP

Analytical Method : mod. OSHA 1007; HPLC/UV Date : 21-SEP-21

Collection Media : Assay 581 Supervisor : MWJ

Login No. : L546491





## GALSON

Client Name : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON

Project No. : ACPS IAQ TESTING - 4920002

Date Sampled: 08-SEP-21 Account No.: 15354
Date Received: 14-SEP-21 Login No.: L546491

Date Analyzed: 15-SEP-21

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

6601 Kirkville Road

East Syracuse, NY 13057 (315) 432-5227

L546491 (Report ID: 1265197):

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)

L546491 (Report ID: 1265197):

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

Parameter	Accuracy	Mean Recovery
Formaldehyde	+/-12.1%	95.3%

1546491

## 21691317

SGS	New Client		hase Sepa 630 Baltin			Invoice T	∘*∶ <u>Phase S</u>	eparation Sc	ience				
000	GALSON	Client Account	70	altimore, I					· · · · · · · · · · · · · · · · · · ·				
			_				•	-					
6601 Kirks East Syrad	ville Rd cuse, NY 13057		Phone No.* : 4	10-747-87	70		Phone N	Phone No.: 410-747-8770					
Tel: (315) 888-4	432-5227 32-LABS (5227)		Cell No. :				Ema	Email: invoicing@phaseonline.com					
		E	Email Results to :_ <u>А</u>	mber Conf	fer			P.O. No. : ODC 4920002-001					
www.sgsg	jalson.com		Email address: re	eporting@p	ohaseonlir	ie.com	Credit Ca	d : Card on Fi	ile Call for C	edit Card I	nfo.		
	<del>                                     </del>		V	Samples submitted using the FreePumpLoan™ Program Samples submitted using the FreeSamplingBac							am		
Need Results By:	(surcharge)	a lofford	on Houston			· · ACBS IAO to	eting 4020002 a	- Vorl C	and				
								oled by: Karl Fo	ora				
									Ī				
□ 2 Business Days 75%  Dosimeter cartrige # noted in the (Hexavelent Chromium Process) colum													
Next Day by 6pm	100%	List description of ind	ustry or Process/inter	ferences pres	ent in sampl	ing area :	State samples were	Please indicate w	which OEL this data will be used for :				
Next Day by Noon	150%	Dublic ando a	ممالمانيط لممطم				collected in (e.g., NY)	OSHA PEL			OSHA		
Same Day 200% Public grade school but				ng · VA			VA	☐ MSHA	Other (specify):				
Sample Identification* (Maxmium of 20 Characters)  Date Sampled  Collection			Collection Mediur	n Samr	e Volume ble Time ble Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Reque	ested*	Method Reference	Process (	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*		
JH - Reception		09/08/21	Assay N581 Aldehyde Bad	<sub>1</sub> e 251		Min	Formaldehyde		mod, OSHA 1007: TPLC/U	v PD478	38		
JH - Hall 116-118		09/08/21	Assay N581 Aldehyde Bad	239		Min	Formaldehyde	***	mod. OSHA 1007: TPLC/U	v PD483	38		
JH - Library		09/08/21	Assay N581 Aldehyde Bad	234		Min	Formaldehyde	mod. OSHA 1007: TPLC/U	v PD530	)8			
JH - Theater		09/08/21	Assay N581 Aldehyde Bad	253		Min	Formaldehyde		mod. OSHA 1007: TPLC/UV PD5066		36		
JH - Hall 140		09/08/21	Assay N581 Aldehyde Bad	248		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	PD53	12		
JH - 133		09/08/21	Assay N581 Aldehyde Bad	<sup>2</sup> 248		Min	Formaldehyde	_	mod. OSHA 1007: TPLC/U	PD47	74		
JH - Mutli Purpose		09/08/21	Assay N581 Aldehyde Bad	e 245		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	PD410	03		
JH - Gym		09/08/21	Assay N581 Aldehyde Bad	∍e 247		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	PD53	14		
JH - Cafe		09/08/21	Assay N581 Aldehyde Bad	e 242		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	/ PD45	56		
JH - 201		09/08/21	Assay N581 Aldehyde Bad	e 222		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	PD47	59		
JH - 218		09/08/21	Assay N581 Aldehyde Bad	231		Min	Formaldehyde		mod. OSHA 1007: TPLC/U	PD442	25		
^Galson Laboratories w	rill subsititute our	routine/preferred meth	nod if it does not mate	h the method	d listed on the	e COC unless this box is	s checked: 🔽 Use method(s	) listed on COC					
For metals analysis: if r	equesting an analy	te with the option of a	lower LOQ, please in	dicate if the I	ower LOQ is	required (only available	e for certain analytes - see SA	G):					
For crystalline silica: for	m(s) of silica need	led must be indicated	(Quartz, Cristobalite,	and/or Tridyn	nite)* :			*					
Chain of Custody	Pri	nt Name/Signature		Date	Time		Print Nam	e/Signature	D	ate	Time		
Relinquished by : Ch	anning Jacks	on		9/08/21	13:30	Received by:		~ / <del>*</del>					
Relinquished by:	Tedk	ans		123/21	(248	<del></del>	any	wh	9/13	121	1242		
Samples received after 3pm will be considered as next day's business  * Required fields failure to complete these fields may result in a delay in your samples being processed.  Page 1 of 2											of 2		

Michelle Krarsise 1.990 helle Krause 9/14/21 0940

21091317

SGS GALSON New C				? Report To* : Pha					nvoice To	*: <u>Phase S</u> e	eparati	on Scie	nce	4. 1	
	<b>3U3</b> (	iALSOF	<u> </u>			ore Natio					<u> </u>			· · · · · ·	
			Client Account	No.*: Bal	timore, N	/ID 21228									
	6601 Kirkvi	lle Rd							Diama No. 440 747 0770						
l		use, NY 13057		Phone No.* : 41(	)-747-8 <u>77</u>	<u>'0</u>			Phone No.: 410-747-8770						
	Tel: (315) 4 888-43	132-5227 12-LABS (5227)		Cell No. :					Email : invoicing@phaseonline.com						
			E	Email Results to : <u>Am</u>	ber Conf	er	, <u></u>		P.O. No. : <u>ODC 4920002-001</u>						
	www.sgsga	aison.com		Email address: rep	ress:reporting@phaseonline.com					Credit Card: Card on File Call for Credit Card Info.					
			•		Samples sui	hmitted usin	g the FreePumpLoan™l	Program	Samples s	ubmitted using the	e FreeSami	nlingBadges	s™ Progra	m	
<u> </u>	Need Results By:	(surcharge)			Jainpies su								- Togia		
	Standard	0%	Site Name :	Name: Project: ACPS IAQ testing - 4920002 Sampled by: Ka											
	4 Business Days	35%	Comments :	ents:											
	3 Business Days	50%	Dosimeter cartr	imeter cartrige # noted in the (Hexavelent Chromium Process) colum											
旦	2 Business Days	75%													
旦	Next Day by 6pm	100%	List description of ind	lustry or Process/interfe	rences pres	ent in sampl	ing area :	State samples we		Please indicate w			_		
	Next Day by Noon	150%	Public grade s	school building	ling			_	in (e.g., NY) SHA PEL ACGIH			<del></del>		JSHA	
	Same Day	200%	- ubilo grado d		VA VA			VA MSHA		☐ MSHA	Other (specify):				
Sample Identification* Date Sampled Collection (Maxmium of 20 Characters)			Collection Medium	Sample Volume Sample Time Sample Area*  Sample Units*: L, ml,min,in2,cm2,ft2			Anal	ysis Reque	ested*	Method F	leference^	Process (e	nt Chromium e.g., welding ainting, etc.)*		
JH - 329 09/08/21 Assay N581 AI			Assay N581 Aldehyde Badge	248	_	Min	Formaldehyde			mod. OSHA	1007: TPLC/UV	PD402	23		
JH	- Hall 316		09/08/21	Assay N581 Aldehyde Badge	245		Min	Formaldehyde			mod, OSHA	1007: TPLC/UV	PD458	34	
JН	- ELA 3rd Floor		09/08/21	Assay N581 Aldehyde Badge	ge 242 Min Formaldehyde			mod. OSHA	1007: TPLC/UV	PD473	0				
JH	- Exit Stair 300		09/08/21	Assay N581 Aldehyde Badge	240		Min	Formaldehyde			mod. OSHA 1007: TPLC/UV		PD423	6	
	·······											-			
		····										:	<u></u>		
$\vdash$										==	<u> </u>				
<u> </u>	<del></del>										-				
ļ															
													ļ		
						:		,					I		
^0	Salson Laboratories wi	Il subsititute ou	r routine/preferred met	hod if it does not match	the method	l listed on th	e COC unless this box is	s checked: 🔽 Use	e method(s	) listed on COC					
-				a lower LOQ, please ind											
Fo	r crystalline silica: forr	m(s) of silica nee	ded must be indicated	(Quartz, Cristobalite, ar	ıd/or Tridyn	nite)* :				:					
Cha	ain of Custody	Pr	int Name/Signature		Date	Time		F	rint Nam	e/Signature		Dat	:е	Time	
Rel	linquished by : Cha	09/	08/21	13:30	Received by :										
Rel	linquished by:	Ted V	Caus	9/	13/21	12:48	Received by:	ar	aren 15/1 9/13/21 12-			1242			
	Samples received after 3pm will be considered as next day's business * Required fields of all முர் ரண்டு முறியு நடித்த குறு இரைய்கள் நடித்த குறிய இரையில் நடித்த குறிய இரு குறிய இரு நடித்த குறிய இரு குறிய இரு நடித்த குறிய இரு குறி														

Michelle Krause Black K.



#### Chain of Custody Form for Subcontracted Analyses

Page 1 of 1

Samples Transferred To: Phase Separation Science, Inc. W.O. No.: SGS North America - NY 21091317 Project Location : Jefferson Houston 6630 Baltimore National Pike 6601 Kirkville Road Baltimore, MD 21228 Phone: (410) 747-8770 East Syracuse, NY 13057 Project Number: 4920002 Fax: (410) 788-8723 Report To LOD: No Old SGS Galson Labs. bsc Phone: 315-432-5227 For Questions or issues please contact: Amber Confer Report Due On:09/21/21 05:00 Field Method Lab Date Time Matrix Analyses Required Type of Preservative Sample ID Sample ID Sampled Sampled Container 581 all 519/1421 Formaldehyde (mod. OSHA 1007, HPLC/UV) 21091317-001 JH- Reception 09/08/21 00:00 VARIOUS NONSC 21091317-002 JH- Hall 116-118 09/08/21 00:00 Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** Air NONSC NON 21091317-003 JH- Library 09/08/21 00:00 Air Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS NONSC NON Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS 21091317-004 JH- Theater 09/08/21 00:00 Air NONSC NON 21091317-005 JH- Hall 140 09/08/21 00:00 Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** NONSC NON 21091317-006 JH- 133 09/08/21 00:00 Air Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** NONSC NON 21091317-007 JH- Multi Purpose 09/08/21 00:00 Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** Air NONSC NON 21091317-008 09/08/21 00:00 Air Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** NONSC JH- Gym NON Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS 21091317-009 JH- Cafe 09/08/21 00:00 Air NONSC NON 21091317-010 09/08/21 00:00 Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** JH-201 Air NONSC NON Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS 21091317-011 JH-218 09/08/21 00:00 Air NONSC NON Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS 21091317-012 JH- 329 09/08/21 00:00 Air NONSC NON 21091317-013 JH- Hall 316 09/08/21 00:00 Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** NONSC Air NON Formaldehyde (mod. OSHA 1007; HPLC/UV) **VARIOUS** 21091317-014 JH- ELA 3rd Floor 09/08/21 00:00 Air NONSC NON Formaldehyde (mod. OSHA 1007; HPLC/UV) VARIOUS 21091317-015 JH-Exit Stair 300 09/08/21 00:00 NONSC NON Air Data Deliverables Required: COA Perform Q.C. on Sample: Send Report Attn: reporting@phaseonline.com Send InvoiceAttn: invoicing@phaseonline.com Airbill No.: \_\_\_\_\_ Carrier : \_\_\_\_\_\_ 1Z2313E40166036170 Date: 09/14/21 Condition Upon Receipt : \_\_\_\_\_\_ Shipper:UPS Comments: Samples Relinquished By: Date: 0|13)71 Prep:UNKNOWN Time: \_\_\_ Samples Received By : \_\_\_\_ Samples Relinquished By: Date : \_\_\_\_ Time: \_\_\_\_\_ Samples Received By: Date: Page 7 of 7 Report Reference: 1 General edit 128 P-21-28-32 Muchelle Kyrause 9/14/21 0940

Page 10 of 14

Page 10 of 14 Samples Relinquished By:



#### **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.: 21091317

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:**

All sample receipt conditions were acceptable.

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

21691317

	SGS GALSON New Client? Report				: Phase Separation Science 6630 Baltimore National Pike Baltimore, MD 21228				*: <u>Phase S</u>	eparation (	Science	е	
Tel: (315) 432-5227 888-432-LABS (5227) Email F www.sgsgalson.com Ema				Cell No. : Email Results to : <u>An</u>	sults to : Amber Confer P.O. No. : ODC 49200 address: reporting@phaseonline.com Credit Card : Card on File						Dphaseonline.com 0002-001		
	Need Results By:	(surcharge)		$\checkmark$	✓ Samples submitted using the FreePumpLoan <sup>™</sup> Program Samples submitted using the FreeSamplingBadges <sup>™</sup> Program								
V	Standa	rd 0%	Site Name : Jeffers	son Houston		Pro	ject: ACPS IAQ te	sting - 4920002 Samp	led by: Karl Fo	ord			
	4 Business Da	ys 35%	Comments :										
	3 Business Da	ys 50%	Dosimeter cartr	ige # noted in the	e (Hexav	elent Chr	omium Process) o	colum					
2 Business Days 75%													
므	Next Day by 6p		List description of ind	ustry or Process/interfe	rences pres	ent in sampl	ing area :	State samples were collected in (e.g., NY)	Please indicate w			sed for : Cal OSHA	
	Next Day by No	Public grade s	school building	20					Other (specif		Cal OSHA		
Sample Identification*				Collection Medium	Sample Volume Sample Time Sample Area*  Sample Units*: L, ml,min,in2,cm2,ft2				Analysis Requested* Metho			evalent Chromium ess (e.g., welding ng, painting, etc.)*	
JH - Reception 09/08/21 Assay N581 Ald				Assay N581 Aldehyde Badge	251		Min	Formaldehyde		mod, OSHA 1007: TF		4788	
JH	- Hall 116-11	3	09/08/21	Assay N581 Aldehyde Badge	239		Min	Formaldehyde		mod. OSHA 1007: TF	LC/UV PD	4838	
JH	- Library		09/08/21	Assay N581 Aldehyde Badge	234		Min	Formaldehyde		mod. OSHA 1007: TF	LC/UV PD	5308	
JH	- Theater		09/08/21	Assay N581 Aldehyde Badge	253		Min	Formaldehyde		mod. OSHA 1007: TF	LC/UV PD	5066	
JH	- Hall 140		09/08/21	Assay N581 Aldehyde Badge	248		Min	Formaldehyde		mod, OSHA 1007: TP	LC/UV PD	5312	
JH	- 133		09/08/21	Assay N581 Aldehyde Badge	248		Min	Formaldehyde		mod, OSHA 1007: TP	_c/uv PD	4774	
JH	- Mutli Purpo:	se	09/08/21	Assay N581 Aldehyde Badge	245		Min	Formaldehyde		mod, OSHA 1007; TP	LC/UV PD	4103	
JH	- Gym		09/08/21	Assay N581 Aldehyde Badge	247		Min	Formaldehyde		mod. OSHA 1007: TP	LC/UV PD	5314	
JH	- Cafe		09/08/21	Assay N581 Aldehyde Badge	242		Min	Formaldehyde		mod. OSHA 1007: TP	-c/uv PD	4556	
JH	- 201		09/08/21	Assay N581 Aldehyde Badge	222		Min	Formaldehyde		mod. OSHA 1007: TP	.c/uv PD	4759	
JH	- 218		09/08/21	Assay N581 Aldehyde Badge	231		Min	Formaldehyde		mod. OSHA 1007: TP	-c/uv PD	4425	
^G	alson Laboratories	will subsititute our	routine/preferred met	nod if it does not match	the method	l listed on the	e COC unless this box is	checked: 🔽 Use method(s)	listed on COC				
For	metals analysis: i	f requesting an analy	yte with the option of a	lower LOQ, please ind	icate if the I	ower LOQ is	required (only available	e for certain analytes - see SAC	G):				
For	crystalline silica:	form(s) of silica need	ded must be indicated	(Quartz, Cristobalite, a	nd/or Tridyn	nite)* :							
Chain of Custody Print Name/Signature					Date	Time		Print Name/Signature Date		Date	Time		
Relinquished by : Channing Jackson				09/	08/21	13:30	Received by:	4012					
Reli	nquished by :	Tedke	aus	7	13/21	(248	Received by :	any	wh	9	BN	1242	
	Samples received after 3pm will be considered as next day's business  * Required fields, failure to complete these fields may result in a delay in your samples being processed.  Page 1 of 2												

21091317

	SGS	GALSON		New Client? Report To* : Phase Separation Science  6630 Baltimore National Pike  Baltimore, MD 21228					nvoice To	°*:Phase Se	eparation Scie	ence		
	East Sy	rkville Rd racuse, NY 13057		Phone No.* : 41(	)-747-8770				Phone No.: 410-747-8770					
		5) 432-5227 3-432-LABS (5227)		Cell No. :					Email: invoicing@phaseonline.com					
			Ī	Email Results to : <u>Am</u>	ber Confer				P.O. No. : ODC 4920002-001					
	www.s	sgalson.com		Email address: rep	orting@pha	aseonlin	ie.com		Credit Car	d : Card on Fil	e Call for Cre	dit Card Info	о.	
					Samples subm	nitted usin	g the FreePumpLoan™	Program	Samples s	ubmitted using the	e FreeSamplingBadge	s™ Progran	n	
	Need Results By:	(surcharge)												
V	Stand	ard 0%	Site Name :		1000	Pro	ject: ACPS IAQ te	sting - 4920002	2 Samp	oled by: Karl Fo	ord			
	4 Business D	-	Comments :											
4	3 Business D		Dosimeter carti	rige # noted in the	omium Process) o	colum								
2 Business Days 75%  Next Day by 6pm 100% List description of industry or Process/interferences present in sampling area:  Next Day by Noon 150% Dublic grade cab add by ilding										Discos in Control	hich OEL this data wil			
片	Next Day by 6		List description of ind	lustry or Process/Interre	The state of the s			State samples were collected in (e.g., I			ACGIH TLV	Cal Os		
片	Next Day by No		Public grade s	school building				VA		☐ MSHA	Other (specify):			
Same Day 200%  Sample Identification* (Maxmium of 20 Characters)  Date Sampled Collection					Sample Volume Sample Time Sample Area*  Sample Units*: L, ml,min,in2,cm2,ft2				ysis Reque		Method Reference^	Process (e.	t Chromium g., welding inting, etc.)*	
JH ·	- 329		09/08/21	Assay N581 Aldehyde Badge	248		Min	Formaldehyde			mod. OSHA 1007: TPLC/UV	PD4023	3	
JH	- Hall 316		09/08/21	Assay N581 Aldehyde Badge	245		Min	Formaldehyde			mod. OSHA 1007: TPLC/UV	PD4584	4	
JH	- ELA 3rd Flo	or	09/08/21	Assay N581 Aldehyde Badge	242		Min	Formaldehyde			mod. OSHA 1007: TPLC/UV	PD4730	)	
JH	- Exit Stair 3	00	09/08/21	Assay N581 Aldehyde Badge	240		Min	Formaldehyde			mod. OSHA 1007: TPLC/UV	PD4236	;	
											20.000			
								e						
^G	alson Laboratorie	s will subsititute our	routine/preferred met	hod if it does not match	the method lis	sted on the	e COC unless this box is	checked: 🔽 Use	method(s	) listed on COC				
For	metals analysis:	if requesting an anal	yte with the option of a	a lower LOΩ, please indi	cate if the low	er LOQ is	required (only available	for certain analyte	s - see SA	G):				
For	crystalline silica	form(s) of silica need	ded must be indicated	(Quartz, Cristobalite, ar	nd/or Tridymite	∍)*:	_							
Chain of Custody Print Name/Signature					Date	Time		P	rint Nam	e/Signature	Da	te	Time	
Relinquished by: Channing Jackson				09/	08/21	13:30	Received by :							
Relinquished by: ( ed Kaus					13/21	12:48	Received by:	ar	en	Non	[9]13]	U	1242	
	Samples received after 3pm will be considered as next day's business													

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

Page 2 of 2



#### 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.: 21091317

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? Yes MD DW Cert. No. N/A

Chain of Custody Yes

Sample Container Custody Seal(s) Intact? Not Applicable

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

Intact? Yes

Labeled and Labels Legible? Yes

Holding Time Total No. of Samples Received 15

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

**Preservation** 

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

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

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

Samples Inspected/Checklist Completed By:	Jules I loofer	Date: 09/13/2021
	Amber Confer	

PM Review and Approval:

Lynn Jackson
Page 14 of 14

Date: 09/13/2021

Version 1.000

SGS	ALSOI	New Client?	Report To* :					Invoice To	o*:				
343	ALSUI	Client Account											
		Cheffit Account											
6601 Kirkvi	lle Rd use, NY 13057		 Phone No.* :					Phone No.:					
Tel: (315) 4	32-5227		Cell No. :					Phone No.:					
888-43	2-LABS (5227)			Cell No. : Results to :									
www.sgsga	alson.com									nfo.			
			_										
Need Results By:	(surcharge)			Samples subn	nitted usin	g the FreePumpLoan <sup>™</sup>	Program	Samples s	submitted using th	ie FreeSam	plingBadge	s™ Progra	am
Standard	0%	Site Name :			Pro	ject :		Samp	oled by :				
4 Business Days	35%	Comments :											
3 Business Days	50%												
2 Business Days 75%													
Next Day by 6pm 100% List description of industry or Process/interferences present in sampling area : State samples were Please indicate which OEL this data will be used for :													
Next Day by Noon 150% collected in (e.g., NY) OSHA PEL ACGI												Cal	OSHA
Same Day	200%								MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 Cl		Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*  Sample Area			Ana	alysis Reque	ested*	Method F	Reference^	Process (	ent Chromium e.g., welding painting, etc.)*
^Galson Laboratories wil	II subsititute ou	r routine/preferred meth	I nod if it does not match	L the method li	sted on the	e COC unless this box is	s checked: U	se method(s	s) listed on COC	<u> </u>		l	
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 analy	tes - see SA	.G):				
For crystalline silica: forn	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:		<u>-</u>						
Chain of Custody	Pr	int Name/Signature	Г	Date	Time			Print Nam	e/Signature		Da	te	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												

SGS	ALSOI	New Client?	Report To* :					Invoice To	o*:				
343	ALSUI	Client Account											
		Cheffit Account											
6601 Kirkvi	lle Rd use, NY 13057		 Phone No.* :					Phone No.:					
Tel: (315) 4	32-5227		Cell No. :					Phone No.:					
888-43	2-LABS (5227)			Cell No. : Results to :									
www.sgsga	alson.com									nfo.			
			_										
Need Results By:	(surcharge)			Samples subn	nitted usin	g the FreePumpLoan <sup>™</sup>	Program	Samples s	submitted using th	ie FreeSam	plingBadge	s™ Progra	am
Standard	0%	Site Name :			Pro	ject :		Samp	oled by :				
4 Business Days	35%	Comments :											
3 Business Days	50%												
2 Business Days 75%													
Next Day by 6pm 100% List description of industry or Process/interferences present in sampling area : State samples were Please indicate which OEL this data will be used for :													
Next Day by Noon 150% collected in (e.g., NY) OSHA PEL ACGI												Cal	OSHA
Same Day	200%								MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 Cl		Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*  Sample Area			Ana	alysis Reque	ested*	Method F	Reference^	Process (	ent Chromium e.g., welding painting, etc.)*
^Galson Laboratories wil	II subsititute ou	r routine/preferred meth	I nod if it does not match	the method li	sted on the	e COC unless this box is	s checked: U	se method(s	s) listed on COC	<u> </u>		l	
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 analy	tes - see SA	.G):				
For crystalline silica: forn	n(s) of silica nee	eded must be indicated	(Quartz, Cristobalite, an	d/or Tridymit	e)*:		<u>-</u>						
Chain of Custody	Pr	int Name/Signature	Г	Date	Time			Print Nam	e/Signature		Da	te	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.: 21091312

September 21, 2021

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

Reference: PSS Project No: 21091312

Project Name: ACPS IAQ Testing Project Location: Jefferson Houston

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) **21091312**.

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 October 18, 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.: 21091312

#### **Project ID: 4920002**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/13/2021 at 12:42 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21091312-001	JH Reception	AIR	09/07/21 00:00
21091312-002	JH Hall 116-118	AIR	09/07/21 00:00
21091312-003	JH Library	AIR	09/07/21 00:00
21091312-004	JH Theater	AIR	09/07/21 00:00
21091312-005	JH Hall 140	AIR	09/07/21 00:00
21091312-006	JH 133	AIR	09/07/21 00:00
21091312-007	JH Multi Purpose	AIR	09/07/21 00:00
21091312-008	JH Gym	AIR	09/07/21 00:00
21091312-009	JH Cafe	AIR	09/07/21 00:00
21091312-010	JH 201	AIR	09/07/21 00:00
21091312-011	JH 218	AIR	09/07/21 00:00
21091312-012	JH 329	AIR	09/07/21 00:00
21091312-013	JH Hall 316	AIR	09/07/21 00:00
21091312-014	JH ELA 3rd Floor	AIR	09/07/21 00:00
21091312-015	JH Exit Stair 300	AIR	09/07/21 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

SCIENCE

Project Name: ACPS IAQ Testing

PSS Project No.: 21091312

#### 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 21, 2021

Login# L546489

Account# 15354

Dear Amber Confer:

Enclosed are the analytical results for the samples received by our laboratory on September 14, 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. : L546489

#### **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



#### LABORATORY ANALYSIS REPORT

## GALSON

6601 Kirkville Road
East Syracuse, NY 13057

(315) 432-5227 FAX: (315) 437-0571 www.sqsqalson.com Client : Phase Separation Science, Inc. Account No.: 15354 Site : JEFFERSON HOUSTON Login No. : L546489

Project No. : ACPS IAQ TESTING-4920002

Date Sampled : 07-SEP-21 Date Analyzed : 15-SEP-21 - 16-SEP-21

Date Received : 14-SEP-21 Report ID : 1265458

#### 4-Phenylcyclohexene (4PCH low LOQ)

		Air Vol	Front	Back	Total	Conc	ppm
Sample ID	<u>Lab ID</u>	liter	uq	uq	uq	mq/m3	
JH RECEPTION	L546489-1	50.2	<0.2	<0.2	<0.2	<0.004	<0.0006
JH HALL 116-118	L546489-2	47.8	<0.2	<0.2	<0.2	<0.004	<0.0007
JH LIBRARY	L546489-3	46.8	<0.2	<0.2	<0.2	<0.004	<0.0007
JH THEATER	L546489-4	50.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JH HALL 140	L546489-5	49.6	<0.2	<0.2	<0.2	<0.004	<0.0006
ЈН 133	L546489-6	49.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JH MULTI PURPOSE	L546489-7	49	<0.2	<0.2	<0.2	<0.004	<0.0007
JH GYM	L546489-8	49.4	<0.2	<0.2	<0.2	<0.004	<0.0006
JH CAFE	L546489-9	48.4	<0.2	<0.2	<0.2	<0.004	<0.0007
ЈН 201	L546489-10	44.4	<0.2	<0.2	<0.2	<0.005	<0.0007
ЈН 218	L546489-11	46.2	<0.2	<0.2	<0.2	<0.004	<0.0007
ЈН 329	L546489-12	49.6	<0.2	<0.2	<0.2	<0.004	<0.0006
JH HALL 316	L546489-13	49	<0.2	<0.2	<0.2	<0.004	<0.0007
JH ELA 3RD FLOOR	L546489-14	48.4	<0.2	<0.2	<0.2	<0.004	<0.0007
JH EXIT STAIR 300	L546489-15	48	<0.2	<0.2	<0.2	<0.004	<0.0007

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

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

Analytical Method : mod. NIOSH 1501; GC/PID Date : 20-SEP-21

Collection Media : 226-01 Supervisor : KAG





## **GALSON**

Client Name : Phase Separation Science, Inc.

Site : JEFFERSON HOUSTON

Project No. : ACPS IAQ TESTING-4920002

Date Sampled: 07-SEP-21 Account No.: 15354
Date Received: 14-SEP-21 Login No.: L546489

Date Analyzed: 15-SEP-21 - 16-SEP-21

L546489 (Report ID: 1265458):

6601 Kirkville Road

FAX: (315) 437-0571

www.sgsgalson.com

East Syracuse, NY 13057 (315) 432-5227

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

L546489 (Report ID: 1265458):

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 (4PQVI 1 100)	. / 108	00.28
4-Phenylcyclohexene (4PCH low LOQ)	+/-18%	88.2%

1Z2313E40165206989	1	154	648	3		2	1091312	<b></b>						
Date:09/14/21 Shipper:UPS Initials:BGF		New Client?	Report To*	, : Pha	se Separ	ration Sci ore Nation	ence nal Pike		Invoice To	*: <u>Phase Se</u>	paratio	n Scie	nce	
Prep:UNKNOWN		Client Account N	lo.*:			D 21228								
PLSD : DIVITIONIA		<u> </u>	•						·					
I East Syrac	use, NY 13057		Phone No.*	410	747-877	0			Phone No.: 410-747-8770  Email: invoicing@phaseonline.com					
Tel: (315)		(90)	Cell No.						•	P : ODC 49200		ne.com		
		E	mail Results to						•	d : Card on File		all for Cred	it Card In	fo.
www.sgsg	jalson.com		Email address	s: repo	orting@pi	naseoniin	e.com		-	_				
		ĺ		<b>☑</b> s	amples sub	mitted using	g the FreePumpLoan™i	Program	Samples s	ubmitted using the	FreeSampl	ingBadges	.™ Prograr	n
Need Results By:	(surcharge)	Site Name: TCF	Eccson Va	~sto		Proj	ect: ACPS IAQ te	sting - 49	20002 Samp	oled by: Karl Fo	ord			
Standard		Comments:	O ZON NO	<u>-3(0</u>										
4 Business Days 3 Business Days		Comments.												
3 Business Days 2 Business Days													1 44	
Next Day by 6pm		List description of ind	ustry or Process/	interfer	ences prese	ent in sampli	ng area :	State samp collected in		Please indicate w			Cal O	
Next Day by Noon 150% Public grade school								VA	,	MSHA	Other (s			
☐ Same Day	200%	Fublic grade c											Hexavaler	nt Chromium
Sample Identification* Date Sample (Maxmium of 20 Characters)			Collection Me	fedium Sample Time Sample Area*			Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requ	ested*	Method Re			e.g., welding ainting, etc.)*
JH Reception		09/07/21	Sm Charcoal tubes	/ 226-01	50.2		L	4-Phenylo	yclohexene		mod. NIO			
JH Hall 116 - 118		09/07/21	Sm Charcoal tubes	/ 226-01				4-Phenylo	yclohexene		mod. NIO		<u> </u>	
JH Library		09/07/21	Sm Charcoal tubes	/ 226-01	46.8 L 4-Phenylcyclo			yclohexene		mod. NIO				
JH Theater		09/07/21	Sm Charcoal tubes	/ 226-01	50.6		L	4 Thomytoy diction control			mod. NIO			
JH Hall 140		09/07/21	Sm Charcoal tubes	/ 226-01	49.6		L	4-Phenylo	yclohexene		mod. NIO			
JH 133		09/07/21	Sm Charcoal tubes	/ 226-01	49.6		L	4-Phenylo	cyclohexene		mod, NIO			
JH Multi Purpose		09/07/21	Sm Charcoal tubes	/ 226-01	49		L	4-Phenylo	cyclohexene		mod. NIO			
JH Gym		09/07/21	Sm Charcoal tubes	/ 226-01	49.4		L	4-Phenylo	cyclohexene		mod. NIC			
JH Cafe		09/07/21	Sm Charcoal tubes	/ 226-01	48.4		L	<del></del>	cyclohexene		mod. NIO			
JH 201		09/07/21	Sm Charcoal tubes	/ 226-01	44.4		L	<u> </u>	cyclohexene		mod. NIC			
W 040	· · · · · · · · · · · · · · · · · · ·	09/07/21	Sm Charcoal tubes	/ 226-01	46.2		L		cyclohexene		mod. NIC	SH 1501	<u></u>	
1Calona Laboratorias	will subsititute o	our routine/preferred me	thod if it does no	t match	the metho	d listed on th	ne COC unless this box	is checked:	✓ Use method	s) listed on COC				
For metals analysis: if	f requesting an ar	alyte with the option of	a lower LOQ, ple	ase inc	licate if the	lower LOQ is	required (only availab	le for certain	analytes - see S	AG):				<u> </u>
For crystalline silica:	form(s) of silica n	eeded must be indicated	i (Quartz, Cristob	alite, a	nd/or Tridy	mite)*:				· · · · · · · · · · · · · · · · · · ·		Da	••	Time
Chain of Custody Print Name/Signature					Date	Time			Print Nar	ne/Signature		Da	re	
Relinquished by: Channing Jackson				9/	5/21	19:00	Received by:	04	ung (	von		01/13/	$\frac{1}{\nu_1}$	1242
Relinquished by:	Téa	& Kraus		9/1	3/21	1245 lafter 3nm	will be considered a	s next day		· · · · · · · · · · · · · · · · · · ·	<u> </u>			
		*	ऽ Required fिरुधि	ef510	te to consen	pletet tReside	Feidee:4y@eHeiat	edeley isi	anizaubleep	ing processed.		F		of <u>2</u>
							ge 8 of 14			1.000 - 12.7#	M	- 41	4	14/21

Brett Greneric-Fischer But Nunut - Fischer 1114121

21091312

SGS	GALSOI	New Client		6630	se Separation S D Baltimore Nation Imore, MD 2122	onal Pike	Invoice To	∘*∶ <u>Phase S</u> ———	eparation Sci	ence	
Tel: (315 888-	kville Rd acuse, NY 13057 i) 432-5227 432-LABS (5227) agalson.com		Cell No. Email Results to	:Amber Confer s: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:	(surcharge)	Samples submitted using the FreePumpLoan™ Program Samples submitted using the FreeSamplingBadges™ Program									
Standar	d 0%	Site Name: Jef	Site Name: Sefferson Houston Project: ACPS IAQ testing - 4920002 Sampled by: Karl Ford								
4 Business Day	rs 35%	Comments:						, , , , , , , , ,	O. G.		
3 Business Day	/s 50%										
2 Business Day	's 75%										
Next Day by 6pm		List description of industry or Process/interferences present in sampling area : State samples were Please indicate which OEL this data will be								ill be used	for:
Next Day by Noo		Public grade s	school				1		ACGIH TLV Cal OSHA		OSHA
Same Day 200%							VA	MSHA	Other (specify):		
Sample Identification* (Maxmium of 20 Characters)		Date Sampled	Collection Medium		Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*		Method Reference	Process	ent Chromium (e.g., welding painting, etc.)*
JH 329		09/07/21	Sm Charcoal tubes / 226-01		9.6	L	4-Phenylcyclohexene m		mod. NIOSH 150	1	
JH Hall 316		09/07/21	Sm Charcoal tubes / 226-01		o1 49 L		4-Phenylcyclohexene		mod. NIOSH 150	1	
JH ELA 3rd Floor		09/07/21	Sm Charcoal tubes / 226-01		o1 48.4 L				mod. NIOSH 150	1	
JH Exit Stair 300		09/07/21	Sm Charcoal tubes / 226-01		8	L	4-Phenylcyclohexene		mod. NIOSH 1501		
•			Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene		mod. NIOSH 1501		
			Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene m		mod. NIOSH 150°	NIOSH 1501	
			Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene r		mod. NIOSH 1501		
			Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene mod		mod. NIOSH 150°	nod. NIOSH 1501	
			Sm Charcoal tubes / 226-01		L :		4-Phenylcyclohexene		mod. NIOSH 1501		
			Sm Charcoal tubes / 2	226-01		L	4-Phenylcyclohexene		mod. NIOSH 1501		
Sm Charcoal tut			Sm Charcoal tubes / 2	pes / 226-01		L	4-Phenylcyclohexene		mod. NIOSH 1501		
*Galson Laboratories v	vill subsititute our	routine/preferred meth	od if it does not m	natch the	method listed on the	COC unless this box is	s checked: Vse method(s	listed on COC		•	
For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):											
For crystalline silica: fo							-				1
Chain of Custody Print Name/Signature				Date Time			Print Name/Signature		D	ate	Time
Relinquished by:					21 19:00	Received by:					
Relinquished by: Ted Kraus				113/	21 1245	Received by:	anter -	2 Jan		M	1242
Samples received after 3pm will be considered as next day's business * Required fields gail দুল্লোপ compale in the fields ক্রেমাণ ক্রিমাণ ক্রিমাণ ক্রিমাণ ক্রিমাণ ক্রিমাণ কর্মাণ ক্রিমাণ ক্রিমাণ কর্মাণ ক্রিমাণ কর্মাণ ক্রিমাণ কর্মাণ ক্রিমাণ কর্মাণ ক											

Brett Grentereinsther But Dunut - Fischer



### Chain of Custody Form for Subcontracted Analyses

Page 1 of 1

							···-·-			
Phase Separation Science, Inc 6630 Baltimore National Pike Baltimore, MD 21228 Phone: (410) 747-8770			W.O. No.: 21091312  Project Location: Jefferson Houston  Project Number: 4920002			Samples Transferred To: SGS North America - NY 6601 Kirkville Road East Syracuse, NY 13057				
23						100 O.L. 1.1.1				
	1 C f	Rep	ort To LOD	: No	Old S Phone		sc			
r issues piease contact: A	mber Conter		Report I	Due On :09/21/21 05:00		315-432-5227				
Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative			
JH Reception	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Hall 116-118	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Library	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Theater	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Hall 140	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH 133	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Multi Purpose	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Gym	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Cafe	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH 201	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH 218	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH 329	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Hall 316	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH ELA 3rd Floor	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
JH Exit Stair 300	09/07/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON			
rt Attn: reporting@	phaseonline.co			-	-	nvoicing@phaseo	nline.com			
					•					
					1					
hed By: All Con	7 Date : 913	5/2/ T	ime:	Samples Received By : Brett G	renert-Fischer Butt	Minut - Fire	hus 9/14/2			
hed By:	Date :	Dogo 7 of 7	Γime :	Samples Received By:	24 00.05		04			
hed By:	Date:	rage / of /	, кероп Гіте:	Samples Received By:	21 00.00					
	cience, Inc tional Pike 128 13770 13 r issues please contact: A  Field Sample ID  JH Reception JH Hall 116-118 JH Library JH Theater JH Hall 140 JH 133 JH Multi Purpose JH Gym JH Cafe JH 201 JH 218 JH 329 JH Hall 316 JH ELA 3rd Floor JH Exit Stair 300  erables Required: rt Attn: reporting@ ecceipt: thed By:	cience, Inc tional Pike 128 13770 13 r issues please contact: Amber Confer  Field Date Sample ID Sampled  JH Reception 09/07/21  JH Hall 116-118 09/07/21  JH Library 09/07/21  JH Theater 09/07/21  JH Hall 140 09/07/21  JH Multi Purpose 09/07/21  JH Gym 09/07/21  JH Cafe 09/07/21  JH 201 09/07/21  JH 218 09/07/21  JH 218 09/07/21  JH 218 09/07/21  JH ELA 3rd Floor 09/07/21  JH ELA 3rd Floor 09/07/21  JH Exit Stair 300 09/07/21  erables Required: COA  rt Attn: reporting@phaseonline.co	Cience, Inc	Science, Inc	W.O. No. :	Sample   S	Samples   Samp			



#### **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.: 21091312

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:**

All sample receipt conditions were acceptable.

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

### 21091312

SGS GALSON New Client? Report To					66	: Phase Separation Science Invoice To* : Phase Separation Science Baltimore, MD 21228						paration Science		
	East Sy Tel: (31 88	kville Rd racuse, NY 13057 5) 432-5227 -432-LABS (5227) sgalson.com	ı	– Phone No Cell I Email Results	No. :	0-747-87 ber Con			Phone No.: <u>410-747-8770</u> Email : <u>invoicing@phaseonline.com</u> P.O. No. : <u>ODC 4920002-001</u>					
	www.si	sgaison.com		Email address: reporting@phaseonline.com Credit Card : Card on File Call for Credit C								iit Card Ir	ıfo.	
	Need Results By:	(surcharge)				Samples submitted using the FreePumpLoan™ Program Samples submitted using the FreeSamplingBadges™ Program								ım
	Stand	rd 0%	Site Name: TCF	ferson H	ousto	Λ	Pro	ject : ACPS IAQ te	esting - 4920002 sam	pled by: Karl F	ord			
	4 Business D		Comments:											
片	3 Business D	<del></del>												
屵	2 Business Day Next Day by 6		List description of ind	uetny or Proces	ec/intorfo	rancae nras	cent in campl	ing area :	State samples were	Please indicate w	which OEL thi	io data will	be used	<del></del>
	Next Day by No		•	·	33,,,,,,	rondos prod	oon in sampi	ing area.	collected in (e.g., NY)	OSHA PEL	ACGIH		Cal C	
	Same D	ay 200%	Public grade s	Public grade school VA										
		Sample Identification* Date Sampled Collection M			Medium	Sample Volume Sample Time Sample Area*		Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*		Method Re	eference^	Process (e	nt Chromium e.g., welding ainting, etc.)*
JH Reception			09/07/21	Sm Charcoal tubes / 226-01		50.2		L	4-Phenylcyclohexene		mod. NIOSH 150			
JH	Hall 116 - 11	3	09/07/21	Sm Charcoal tubes / 226-01		47.8		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Library		09/07/21	Sm Charcoal tubes / 226-01		46.8		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Theater		09/07/21	Sm Charcoal tubes / 226-01		50.6		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Hall 140		09/07/21	Sm Charcoal tubes / 226-01		49.6		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	133		09/07/21	Sm Charcoal tubes / 226-01		49.6		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Multi Purpos		09/07/21	Sm Charcoal tube	s / 226-01	49		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Gym		09/07/21	Sm Charcoal tube	s / 226-01	49.4		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH	Cafe		09/07/21	Sm Charcoal tube	s / 226-01	48.4		L	4-Phenylcyclohexene		mod. NIOSH 1501			
JH:	201		09/07/21	Sm Charcoal tube	s / 226-01	44.4		L	4-Phenylcyclohexene		mod. NIOS	SH 1501	· ·	
JH:	218		09/07/21	Sm Charcoal tube	s / 226-01	46.2		L	4-Phenylcyclohexene mod. NIOSH 1501					
^G	alson Laboratorie:	will subsititute our	routine/preferred meth	od if it does no	ot match	the method	d listed on the	COC unless this box is	checked: 🔽 Use method(s	s) listed on COC	···········			
	<del></del>		<del></del>						for certain analytes - see SA			·		
For	crystalline silica:	orm(s) of silica need	ed must be indicated (	Quartz, Cristot	alite, an	d/or Tridyn	nite}* :							
Chain of Custody Print Name/Signature				C	ate	Time		Print Nam	e/Signature		Dat	Э	Time	
Reli	nquished by :	Channing =	<i>sackson</i>		9/5	1/21	19:00	Received by :						
Reli	nquished by :	Ted	Kaus		9/13	5/21	1245	Received by :	······································	Jon		0/13/7		1242
	Samples received after 3pm will be considered as next day's business  * Required fields, failure to complete these fields may result in a delay in your samples being processed  Page 1 of 2													

Page 12 of 14

Version 1.000

21091312

								<u> </u>						
	SGS G	ALCO	New Client? Report To*: Phase Separation Science						Invoice To*: Phase Separation Science					
	oud t	ALSU	V	6630 Baltimore National Pike										
Client Account No.*:					iitimore,	MD 2122	8							
ļ	6601 Kirkvi	lie Rd		<u> </u>										
	East Syracu	use, NY 13057		Phone No.* : 41	0-747-87	770	*****		Phone N	lo.: 410-747-8	770			
	Tel: (315) 4 888-43	132-5227  2-LABS (5227)	)	Cell No. :					Ema	ail: <u>invoicing@</u>	<u>)phaseonline</u>	∍.com		
l	1404544 60000	oleen som		Email Results to : An	nber Cor	nfer				o.: <u>ODC 4920</u>				
	www.sgsga	315011.00111		Email address: rep	orting@	<u>phaseonli</u>	ne.com		Credit Car	rd : Card on Fi	ile Call t	for Cred	it Card In	ıfo.
_					Comples	والمراد المحافظة مسطور	ng the FreePumpLoan™	n	0				<b></b>	
<u> </u>	Need Results By:	(surcharge)			Samples s	abmitted usir	ig the FreerumpLoan	Program	Samples s	ubmitted using th	e FreeSampling	¡Badges¹	M Prograi	m
V	Standard	0%	Site Name: Jef	ferson Houst	2 ^	Pro	oject: ACPS IAQ te	esting - 492000	2 Samp	oled by: Karl F	ord	·		
	4 Business Days	35%	Comments:											
	3 Business Days	50%												
	2 Business Days	75%	V-V											
	Next Day by 6pm	100%	List description of inc	dustry or Process/interfe	rences pre	sent in sampl	ling area :	State samples we		Please indicate w	hich OEL this d	ata will I	oe used f	for :
	Next Day by Noon	150%	Public grade	school				collected in (e.g.,	NY)		ACGIH TLV	-	Cal O	SHA
	Same Day	200%	. asiis grado	<del></del>	<del></del>			VA		MSHA	Other (spec	ify):		
Sample Identification* Date Sampled Co			Collection Medium	Sample Volume Sample Time Sample Area*		Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*		sted*	Method Refere	ence^ 1	Process (e.	nt Chromium e.g., welding sinting, etc.)*	
J۲	1 329		09/07/21	Sm Charcoal tubes / 226-01	49.6		L	4-Phenylcyclohexene			mod. NIOSH 1501		3,,,	
Jŀ	l Hall 316		09/07/21	Sm Charcoal tubes / 226-01	01 49		L	4-Phenylcyclohexene			mod. NIOSH 1501		W-10-10-10-10-10-10-10-10-10-10-10-10-10-	
Jŀ	I ELA 3rd Floor		09/07/21	Sm Charcoal tubes / 226-01	01 48.4		L	4-Phenylcyclohexene			mod. NIOSH 1501			
Jŀ	l Exit Stair 300		09/07/21	Sm Charcoal tubes / 226-01	o <sub>1</sub> 48		L	4-Phenylcyclohexene		***************************************	mod. NIOSH 1501			
L		•		Sm Charcoal tubes / 226-01	6-01		L	4-Phenylcyclohexene			mod. NIOSH 1501			
	**************************************			Sm Charcoal tubes / 226-01	as / 226-01		L	4-Phenylcyclohexene			mod. NIOSH 1501			
_				Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene			mod. NIOSH 1501			
				Sm Charcoal tubes / 226-01	226-01		L.	4-Phenylcyclohexene			mod. NIOSH 1501			
L				Sm Charcoal tubes / 226-01	226-01		L	4-Phenylcyclohexene			mod. NIOSH 1501			
				Sm Charcoal tubes / 226-01			L	4-Phenylcyclohexene			mod. NIOSH	1501		
Sm Charcoal tubes / 226-01 L 4-Phe							4-Phenylcyclohe	xene		mod. NIOSH	1501			
٨٥	Salson Laboratories will	subsititute our	routine/preferred met	hod if it does not match	the metho	d listed on the	COC unless this box is	checked: V Use	method(s)	listed on COC	**************************************			
Fo	r metals analysis: if req	uesting an anal	yte with the option of a	a lower LOQ, please indi	cate if the	lower LOQ is	required (only available	for certain analyte	s - see SAG	S):				
Fo	r crystalline silica: form	(s) of silica need	ded must be indicated	(Quartz, Cristobalite, an	d/or Tridyı	nite)* :							***************************************	
Ch	ain of Custody	Pri	nt Name/Signature	С	ate	Time		Р	rint Name	/Signature		Date		Time
Re	inquished by: C	hanning	Jackson	9/8,	121	19:00	Received by:							
Rel	inquished by :	Ted K	Caus	9/13	/21	1245	Received by :	and	er /	Hor	a	113/	U	1242
	Samples received after 3pm will be considered as next day's business  * Required fields, failure to complete these fields may result in a delay in your samples being processed  Page 2— of 2													



#### **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.: 21091312

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? Yes MD DW Cert. No. N/A

Chain of Custody Yes

Sample Container Custody Seal(s) Intact? Not Applicable

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

Intact? Yes

Labeled and Labels Legible? Yes

Holding Time 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 N/A (pH<2)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.

Samples Inspected/Checklist Completed By:	Outer I longer	Date: 09/13/2021	
	Amber Confer		

PM Review and Approval:

Lynn Jackson
Page 14 of 14

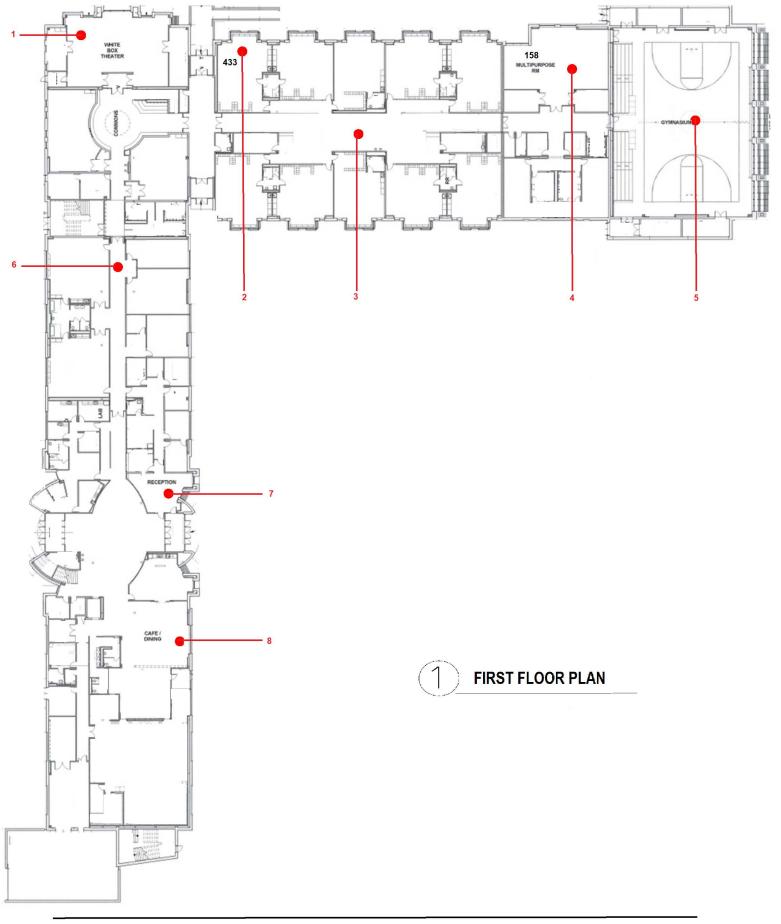
Date: 09/13/2021

Version 1.000

SGS	ALSOI	New Client?	Report To* :					Invoice To	o*:				
343	ALSUI	Client Account											
		Cheffit Account											
6601 Kirkvi	lle Rd use, NY 13057		 Phone No.* :					Phone N	 lo.:				
Tel: (315) 4	32-5227		Cell No. :					Fma	lo.: ail :				
888-43	2-LABS (5227)							P.O. N	0.:				
www.sgsga	alson.com							Credit Car	rd : Card on Fi	le 🗆	Call for Cred	dit Card Ir	nfo.
			_										
Need Results By:	(surcharge)			Samples subn	nitted usin	g the FreePumpLoan <sup>™</sup>	Program	Samples s	submitted using th	e FreeSam	plingBadge	s™ Progra	am.
Standard	0%	Site Name :			Pro	ject :		Samp	oled 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 sampli	ing area :	State samples we		Please indicate w				
Next Day by Noon	150%						collected in (e.g.,	NY)	—	OSHA PEL ACGIH TLV Cal OSHA			
Same Day	200%								MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 Cl		Date Sampled	Collection Medium	Sample	ample Volume sample Time ample Area*  Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requested*		ested*	Method Reference <sup>^</sup>		A Process (e.g., welding plating, painting, etc.)*	
^Galson Laboratories wil	II subsititute ou	r routine/preferred meth	I nod if it does not match	the method li	sted on the	e COC unless this box is	s checked: Us	se 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 low	ver LOQ is	required (only availabl	e for certain analyt	tes - 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		Date	Time			Print Nam	e/Signature		Da	te	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												

SGS	ALSOI	New Client?	Report To* :					Invoice To	o*:				
343	ALSUI	Client Account											
		Cheffit Account											
6601 Kirkvi	lle Rd use, NY 13057		 Phone No.* :					Phone N	 lo.:				
Tel: (315) 4	32-5227		Cell No. :					Fma	lo.: ail :				
888-43	2-LABS (5227)							P.O. N	0.:				
www.sgsga	alson.com							Credit Car	rd : Card on Fi	le 🗆	Call for Cred	dit Card Ir	nfo.
			_										
Need Results By:	(surcharge)			Samples subn	nitted usin	g the FreePumpLoan <sup>™</sup>	Program	Samples s	submitted using th	e FreeSam	plingBadge	s™ Progra	am.
Standard	0%	Site Name :			Pro	ject :		Samp	oled 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 sampli	ing area :	State samples we		Please indicate w				
Next Day by Noon	150%						collected in (e.g.,	NY)	—	OSHA PEL ACGIH TLV Cal OSHA			
Same Day	200%								MSHA	Other (	specify):		
Sample Identifi (Maxmium of 20 Cl		Date Sampled	Collection Medium	Sample	ample Volume sample Time ample Area*  Sample Units*: L, ml,min,in2,cm2,ft2		Analysis Requested*		ested*	Method Reference <sup>^</sup>		A Process (e.g., welding plating, painting, etc.)*	
^Galson Laboratories wil	II subsititute ou	r routine/preferred meth	I nod if it does not match	the method li	sted on the	e COC unless this box is	s checked: Us	se 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 low	ver LOQ is	required (only availabl	e for certain analyt	tes - 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		Date	Time			Print Nam	e/Signature		Da	te	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												

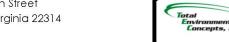




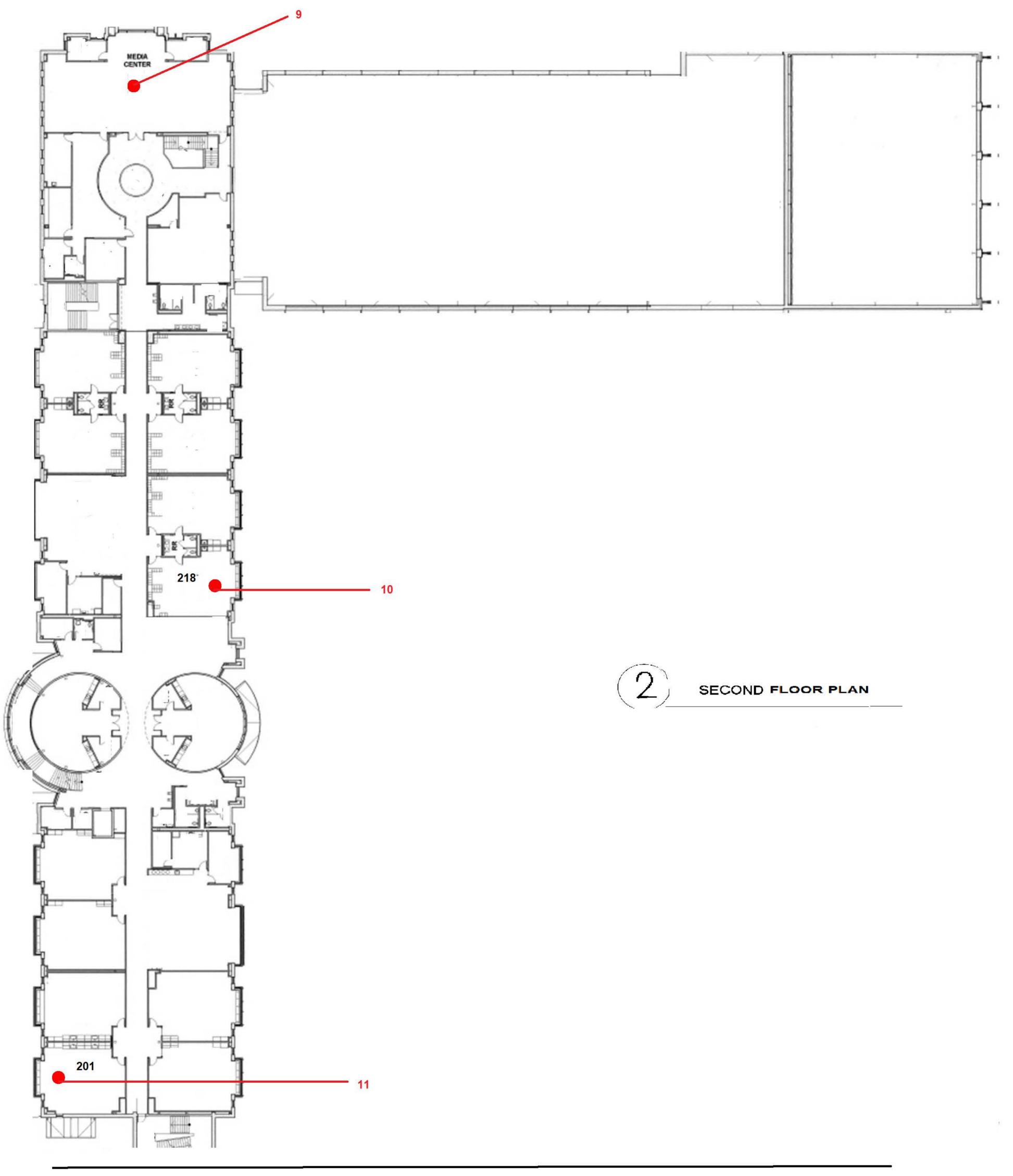
#### Jefferson - Houston PreK - 8 School

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

1501 Cameron Street Alexandria, Virginia 22314







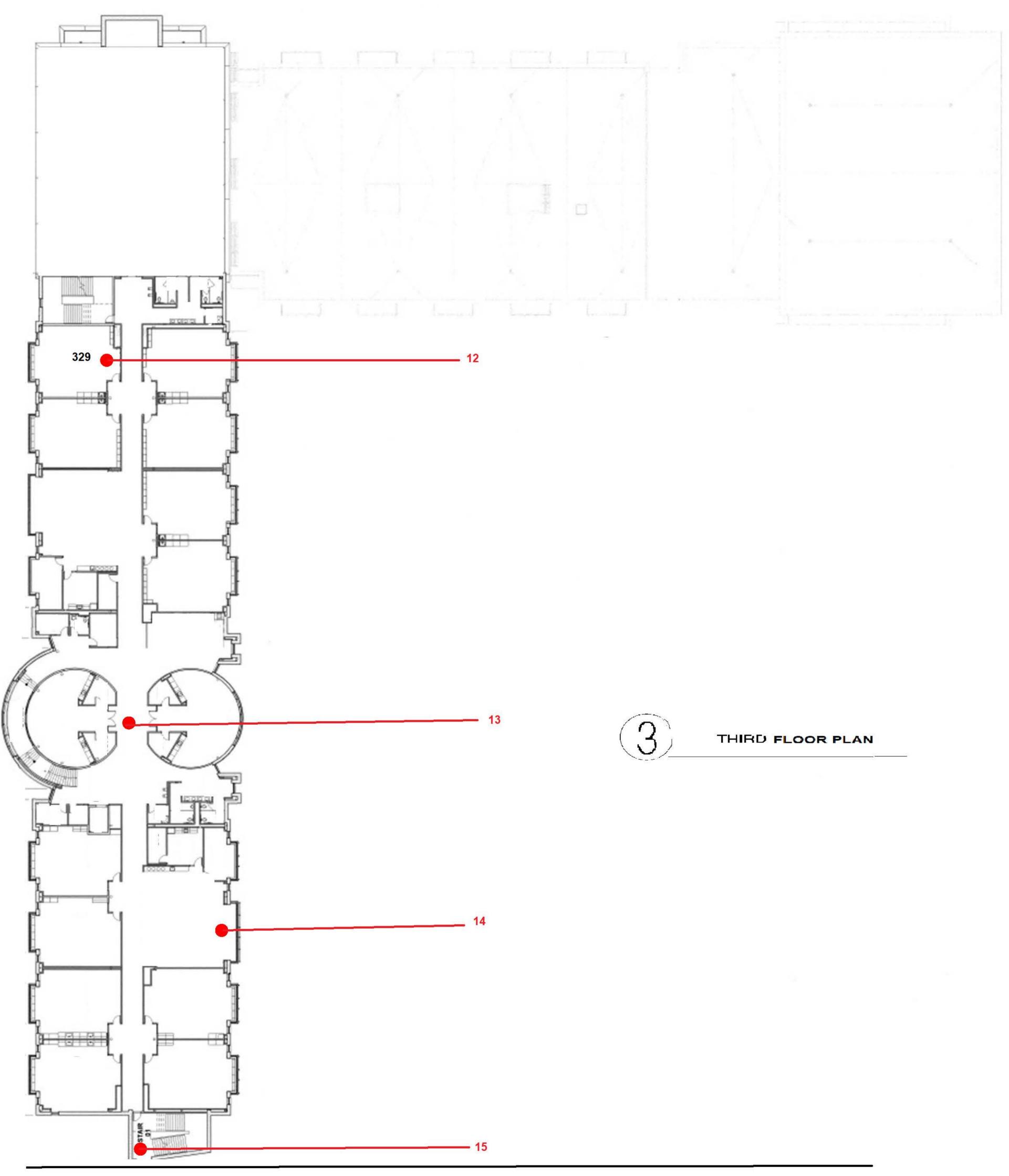
# Jefferson - Houston PreK - 8 School

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

1501 Cameron Street Alexandria, Virginia 22314



8382 Terminal Road, Suite B Lorton, VA 22079 Phone: 703-567-4346 Fax: 703-567-3487



# Jefferson - Houston PreK - 8 School

LEGEND

Sample Location Analyzed For:

Mold
4-polycyclohexene

Radon
Formaldehyde

VOC's (TO+15)

1501 Cameron Street Alexandria, Virginia 22314



8382 Terminal Road, Suite B Lorton, VA 22079 Phone: 703-567-4346 Fax: 703-567-3487

3





Jefferson Houston, Library



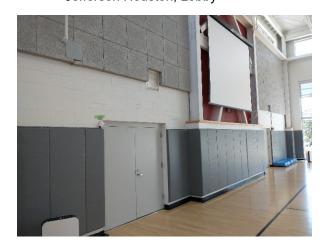
Jefferson Houston, Cafeteria



Jefferson Houston, Lobby



Jefferson Houston, Classroom



Jefferson Houston, Gym



Jefferson Houston, Hallway