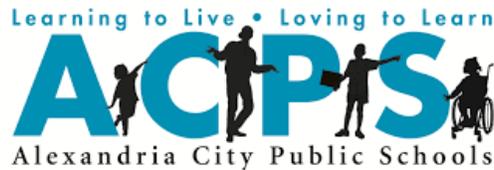


**Total
Environmental
Concepts, Inc.**

Setting the Standard in Comprehensive Environmental Solutions

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INDOOR AIR QUALITY ASSESSMENT REPORT

at

JAMES K. POLK ELEMENTARY SCHOOL

5000 POLK AVE,
ALEXANDRIA, VA 22304



Report Prepared for:

John Contreras

Alexandria City Public Schools

2601 Cameron Mills Rd, Alexandria, VA 22302

Dated: October 5, 2021

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APPENDICES

Appendix A: Mold Analytical Results

Appendix B: Radon Analytical Results

Appendix C: VOCs (TO+15) Analytical Results

Appendix D: Formaldehyde Analytical Results

Appendix E: 4-PCH Analytical Results

Appendix F: Sampling Locations

Appendix G: Photographs

ABBREVIATIONS AND ACRONYMS

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

Abbreviations involving scientific volume and measurements involving media or water sampling

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

1. Executive Summary

Total Environmental Concepts (TEC) was contracted by Alexandria City Public Schools (ACPS) to perform Indoor Air Quality (IAQ) assessments at 19 schools. 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 K. 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 James K. Polk Elementary School on Friday, August 27, 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 the James K Polk Elementary School to obtain a baseline of the number and types of fungal spores in the air. This baseline was compared to the spores collected at the sampling locations since inside spore counts above baseline could indicate internal sources of mold.

Findings:

1. The number of spores in the air was within acceptable ranges in all locations compared to background outside air mold spore counts.
2. Minor water staining was observed in several locations on ceiling tiles. No active leaks could be identified above the drop ceilings. These tiles should be replaced so that active leaking can be detected.

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 maintenance schedule should be established and adhered to.

None of the results from the fifteen sampling locations at James K Polk 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).
- **Formaldehyde** – the levels of formaldehyde recorded at each location were within an acceptable range, compared to EPA Regional Screening Level (RSLs) of 1ug/m³.
- **4-PCH** – levels recorded during this investigation were within the LEED (Leadership of Energy and Environmental Design) IAQ guideline of 6.5 ug/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.

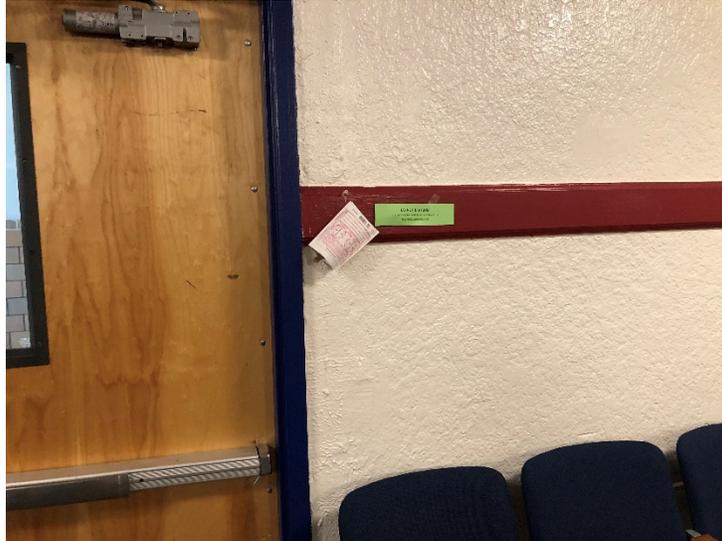
3. Assessment Methods

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 August 26, 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.



4. Visual Observations

Sample Location	August 27, 2021	Visual Observations
Hallway by Room 22-26	Water staining was observed on the ceiling of the hallway by rooms 22-26.	A photograph showing a close-up of a ceiling. The ceiling is a light-colored, textured material. There are several dark, irregular water stains on the ceiling. A white fire exit sign with red lettering is mounted on the ceiling, partially obscured by the stains.

<p>Hallway by Room 25</p>	<p>View of water staining on the ceiling of the hallway by room 25.</p>	
<p>Hallway by Room 22-26</p>	<p>View of water staining on the ceiling of the hallway by rooms 22-26.</p>	

Hallway by Room 22-26	View of water staining on the ceiling of the hallway by rooms 22-26	
-----------------------	---	--

5. 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 are summarized 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.

6. 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 due to 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:

1. The number of spores in the air was within acceptable ranges in all locations compared to background outside air mold spore counts.
2. Minor water staining was observed in several locations on ceiling tiles. Active water intrusion could be observed due to rain during sampling.

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 maintenance schedule should be established and adhered to.

None of the results from the fifteen sampling locations at James K Polk Elementary School were indicative of mold issues.

Mold analytical results can be found in Appendix A.

7. 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.

8. TO+15 (VOC) Sampling Results

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

9. 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.

10.4-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.

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

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

Table 1

Multi-Gas Detector Readings				
Location	VOC	CO	OXYGEN	H2S
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
Gym	0.0	0.0	20.9	0.0
41	0.0	0.0	20.9	0.0
50	0.0	0.0	20.9	0.0
38	0.0	0.0	20.9	0.0
Hall 38	0.0	0.0	20.9	0.0
14	0.0	0.0	20.9	0.0
Hall 8	0.0	0.0	20.9	0.0
1	0.0	0.0	20.9	0.0
22	0.0	0.0	20.9	0.0
Multi-Purpose	0.0	0.0	20.9	0.0
33	0.0	0.0	20.9	0.0
Hall 52	0.0	0.0	20.9	0.0
26	0.0	0.0	20.9	0.0

Table 2

Results of Analytes by Location						
Location	Radon	Mold		TO+15 VOCs	4PCH	Formaldehyde
		AVG: 77 F	AVG: 63 %			
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
Gym	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
41	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
50	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
38	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Hall 38	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
14	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Hall 8	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
1	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
22	< 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
33	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
Hall 52	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL
26	< 4 pCi/L	Spore Count Normal		< RSL	< 6.5 ug/m3	< RSL

**See Section 5 - Ratio abnormalities are most likely caused by fluctuations in daily spore counts*

12. 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.

Appendix A: Mold Analytical Results

Analysis Report prepared for

Total Environmental Concepts, Inc.

8382 Terminal Road
Suite B
Lorton, VA 22079

Phone: (571) 289-2173

James K. Polk

Collected: **August 27, 2021**
Received: **August 30, 2021**
Reported: **August 30, 2021**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 16 samples by FedEx in good condition for this project on August 30th, 2021.

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

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



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



EPA Laboratory ID: VA01419



Lab ID: #188863



DPH License: #PH-0198

Sample Number	1	JP4315321			2	JP4315337			3	JP4315341			4	JP4315342		
Sample Name	JP 41			JP SO			JP 38			JP Hall 34						
Sample Volume	75.00 liter															
Reporting Limit	13 spores/m ³															
Background	2			2			2			2						
Fragments	ND			ND			ND			ND						
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total				
Alternaria																
Ascospores	3	40	100.0%	1	13	100.0%	2	27	66.7%	2	27	100.0%				
Aspergillus Penicillium																
Basidiospores							1	13	33.3%							
Bipolaris Drechslera																
Chaetomium																
Cladosporium																
Curvularia																
Epicoccum																
Fusarium																
Memnoniella																
Myxomycetes																
Pithomyces																
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																
Total	3	40	100%	1	13	100%	3	40	100%	2	27	100%				

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



Collected: **Aug 27, 2021**

Received: **Aug 30, 2021**

Reported: **Aug 30, 2021**

Project Analyst:
 Ramesh Poluri, PhD *P. Ramesh*

Date:
08 - 30 - 2021

Reviewed By:
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:
08 - 30 - 2021

Sample Number	5 JP4315327			6 JP4315332			7 JP4315326			8 JP4315336		
Sample Name	JP 14			JP Hall 8			JP 1			JP Outside		
Sample Volume	75.00 liter											
Reporting Limit	13 spores/m ³											
Background	2			2			2			2		
Fragments	ND			ND			ND			13/m ³		
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Alternaria										1	13	<1%
Ascospores	1	13	100.0%	2	27	66.7%	1	13	25.0%	184	2453	55.9%
Aspergillus Penicillium							3	40	75.0%	3	40	<1%
Basidiospores				1	13	33.3%				96	1280	29.2%
Bipolaris Drechslera												
Chaetomium												
Cladosporium										40	533	12.2%
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes										3	40	<1%
Pithomyces										2	27	<1%
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	1	13	100%	3	40	100%	4	53	100%	329	4386	100%

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

Collected: **Aug 27, 2021**

Received: **Aug 30, 2021**

Reported: **Aug 30, 2021**



Project Analyst:
 Ramesh Poluri, PhD

P. Ramesh

Date:
08 - 30 - 2021

Reviewed By:
 Steve Hayes, BSMT

Stephen N. Hayes

Date:
08 - 30 - 2021

Sample Number	9	JP4315657			10	JP4315331			11	JP4315364			12	JP4315323		
Sample Name	JP Library			JP 22			JP Reception			JP Multipurpose						
Sample Volume	75.00 liter															
Reporting Limit	13 spores/m ³															
Background	2			2			2			2						
Fragments	ND			ND			ND			ND						
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total				
Alternaria																
Ascospores	1	13	100.0%	2	27	66.7%	2	27	40.0%	1	13	33.3%				
Aspergillus Penicillium																
Basidiospores																
Bipolaris Drechslera																
Chaetomium																
Cladosporium				1	13	33.3%	2	27	40.0%							
Curvularia																
Epicoccum																
Fusarium																
Memnoniella																
Myxomycetes							1	13	20.0%	2	27	66.7%				
Pithomyces																
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																
Total	1	13	100%	3	40	100%	5	67	100%	3	40	100%				

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



Collected: **Aug 27, 2021**

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08 - 30 - 2021

Reviewed By:
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:
08 - 30 - 2021

Sample Number	13	JP4315328			14	JP4315330			15	JP4315325			16	JP4315318		
Sample Name	JP Gym			JP 33			JP Hall 52-53			JP 26						
Sample Volume	75.00 liter															
Reporting Limit	13 spores/m ³															
Background	2			2			2			2						
Fragments	ND			ND			ND			ND						
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total				
Alternaria																
Ascospores	3	40	75.0%	2	27	50.0%	1	13	12.5%	4	53	80.0%				
Aspergillus Penicillium							7	93	87.5%							
Basidiospores																
Bipolaris Drechslera																
Chaetomium																
Cladosporium	1	13	25.0%							1	13	20.0%				
Curvularia																
Epicoccum																
Fusarium																
Memnoniella																
Myxomycetes				1	13	25.0%										
Pithomyces				1	13	25.0%										
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																
Total	4	53	100%	4	53	100%	8	106	100%	5	66	100%				

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



Collected: **Aug 27, 2021**

Received: **Aug 30, 2021**

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Project Analyst:
 Ramesh Poluri, PhD *P. Ramesh*

Date:
08 - 30 - 2021

Reviewed By:
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:
08 - 30 - 2021

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	<p>The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of <i>Aspergillus</i> and <i>Penicillium</i> may be obscured. The background is rated on a scale of 1 to 5 and each level is determined as follows:</p> <p>NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)</p> <p>1 : <5% of field occluded. No spores will be uncountable.</p> <p>2 : 5-25% of field occluded.</p> <p>3 : 25-75% of field occluded.</p> <p>4 : 75-90% of field occluded.</p> <p>5 : >90% of field occluded. Suggested recollection of sample.</p>										
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.										
<table border="1"> <tr> <td style="background-color: #ADD8E6;">Water Damage Indicator</td> <td>Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.</td> </tr> <tr> <td style="background-color: #90EE90;">Common Allergen</td> <td>Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.</td> </tr> <tr> <td style="background-color: #FFDAB9;">Slightly Higher than Baseline</td> <td>Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.</td> </tr> <tr> <td style="background-color: #FFB6C1;">Significantly Higher than Baseline</td> <td>Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.</td> </tr> <tr> <td style="background-color: #DDA0DD;">Ratio Abnormality</td> <td>Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.</td> </tr> </table>	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.	Significantly Higher than Baseline	Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.	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%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.	
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.										
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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%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.										
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.										

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.
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.
Myxomycetes	Habitat: Found on decaying plant material and as a plant pathogen. Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Pithomyces

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

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

Analysis Report prepared for

Total Environmental Concepts, Inc.

8382 Terminal Road
Suite B
Lorton, VA 22079

Phone: (571) 289-2173

ACPS IAQ Testing

Collected: **August 27, 2021**
Received: **August 31, 2021**
Reported: **August 31, 2021**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 1 samples by FedEx in good condition for this project on August 31st, 2021.

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

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



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



EPA Laboratory ID: VA01419



Lab ID: #188863



DPH License: #PH-0198

#1	Swab (1.00 cm2)	Organism	Spore Estimate	Mycelial Estimate
JP-1 - JP - Hall 25		No Fungi Detected		



Collected: **Aug 27, 2021**

Received: **Aug 31, 2021**

Reported: **Aug 31, 2021**

Project Analyst:
Steve Hayes, BSMT *Stephen N. Hayes*

Date:
08 - 31 - 2021

Reviewed By:
Ramesh Poluri, PhD *P. Ramesh*

Date:
08 - 31 - 2021

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

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



Placement Tech: Victoria Chamming
 Placement Date: 8/27/2021
 Address: James K Polk
 Sample Type: Kford@tecinc.com
 Email:

Sample #	Location/ room	Flow Rate	Sampling Time	Pump Start Time	Pump End Time	Comments
JP 4315321	JP 411	106L/m	7.5m	1602	1609	
JP 4315337	JP 50			1611	1618	
JP 4315341	JP 38			1632	1635	
JP 4315342	JP hall 34			1621	1628	
JP 4315327	JP 14			1640	1647	
JP 4315332	JP hall 8			1649	1656	
JP 4315326	JP 1			1657	1704	
JP 4315336	JP outside			1559	1607	
JP 4315457	JP library			1703	1711	
JP 4315331	JP 22			1706	1713	
JP 4315364	JP reception			1602	1609	
JP 4315323	JP multipurpose			1615	1624	
JP 4315328	JP Gym			1628	1635	
JP 4315336	JP 33			1641	1649	
JP 4315325	JP hall 52-53			1644	1651	
JP 4315318	JP 26			1657	1705	

Appendix B: Radon Analytical Results

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723769 Result: < 0.3 pCi/l
Location: multi purpose - 2

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 5:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 94 hours 19.3% 70°F

Jp
,

Kit #: 9723777 Result: < 0.3 pCi/l
Location: Gym - 1

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 5:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 94 hours 11.0% 70°F

Jp
,

Kit #: 9723778 Result: < 0.3 pCi/l
Location: Hall 33-32

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 5:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 94 hours 17.6% 70°F

Jp
,

Kit #: 9723784 Result: < 0.3 pCi/l
Location: class 50

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 5:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 94 hours 13.7% 70°F

Jp
,

Kit #: 9723785 Result: < 0.3 pCi/l
Location: class 22/Band

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 16.8% 70°F

Jp
,

Kit #: 9723786 Result: < 0.3 pCi/l
Location: class 33

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 16.7% 70°F

Jp
,

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723789 Result: < 0.3 pCi/l

Location: *Class 41*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 5:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 94 hours 17.3% 70°F

Kit #: 9723790 Result: < 0.3 pCi/l

Location: *multi purpose - 1*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 5:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 94 hours 12.8% 70°F

Kit #: 9723791 Result: < 0.3 pCi/l

Location: *Class 26*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 4:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 95 hours 16.2% 70°F

Kit #: 9723792 Result: < 0.3 pCi/l

Location: *Library - 2*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 4:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 95 hours 16.2% 70°F

Kit #: 9723793 Result: < 0.3 pCi/l

Location: *Library - B*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 4:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 95 hours 7.5% 70°F

Kit #: 9723794 Result: < 0.3 pCi/l

Location: *Library - D*

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 4:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 95 hours 16.4% 70°F

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723795 Result: < 0.3 pCi/l
Location: Hall 8-9

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 15.3% 70°F

Kit #: 9723796 Result: < 0.3 pCi/l
Location: Reception

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 19.6% 70°F

Kit #: 9723797 Result: < 0.3 pCi/l
Location: Library-1

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 15.6% 70°F

Kit #: 9723798 Result: < 0.3 pCi/l
Location: class 1

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 16.1% 70°F

Kit #: 9723799 Result: < 0.3 pCi/l
Location: class 14

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 4:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 95 hours 18.1% 70°F

Kit #: 9723800 Result: < 0.3 pCi/l
Location: CAM -2

Jp
,

Analysis Note :
Analyzed : 2021-09-02 at 10:00 am
Started : 2021-08-27 at 5:00 pm
Ended : 2021-08-31 at 3:00 pm
Hours/MST% : 94 hours 11.1% 70°F

Attention: P8184 / LEILA DEAN / TOTAL ENVIRONMENTAL CONCEPTS

Kit #: 9723862 Result: < 0.3 pCi/l

Location: Hall 34

Jp

,

Analysis Note :

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 5:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 94 hours 15.9% 70°F

Kit #: 9723892 Result: ????

Location: class 38

Jp

,

Analysis Note : WI

Analyzed : 2021-09-02 at 10:00 am

Started : 2021-08-27 at 5:00 pm

Ended : 2021-08-31 at 3:00 pm

Hours/MST% : 94 hours 21.5% 70°F

Appendix C: VOCs (TO+15) Analytical Results

Project Name: ACPS IAQ testing
PSS Project No.: 21091322

September 22, 2021

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



Reference: PSS Project No: **21091322**
Project Name: ACPS IAQ testing
Project Location: James K. Polk ES
Project ID.: 4920002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21091322**.

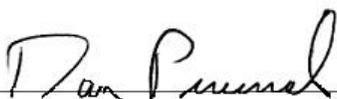
All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis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



Project Name: ACPS IAQ testing

PSS Project No.: 21091322

Project ID: 4920002

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/13/2021 at 12:44 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
21091322-001	JP - 50 Class	AIR	09/09/21 18:50
21091322-002	JP - 41 Class	AIR	09/09/21 18:54
21091322-003	JP - 38 Class	AIR	09/09/21 18:57
21091322-004	JP - 35 Hall	AIR	09/09/21 18:59
21091322-005	JP - Reception	AIR	09/09/21 19:04
21091322-006	JP - 53 Hall	AIR	09/09/21 19:09
21091322-007	JP - 33 Class	AIR	09/09/21 19:13
21091322-008	JP - 26 Class	AIR	09/09/21 19:16
21091322-009	JP - Multi Purpose	AIR	09/09/21 19:20
21091322-010	JP - Gym	AIR	09/09/21 19:24
21091322-011	JP - 22 Band	AIR	09/09/21 19:04
21091322-012	JP - Library	AIR	09/09/21 19:07
21091322-013	JP - Room 14	AIR	09/09/21 19:11
21091322-014	JP - Room 1	AIR	09/09/21 19:18
21091322-015	JP - Outdoor	AIR	09/09/21 19:21

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 contaminants, and part 141.3, for the secondary drinking water contaminants.
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

Project Name: ACPS IAQ testing

PSS Project No.: 21091322

Standard Flags/Abbreviations:

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

Certifications:

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

21 September 2021

Amber Confer
Phase Separation Science, Inc.
6630 Baltimore National Pike, Route 40 West
Baltimore, MD 21228
RE: 4920002

Enclosed are the results of analyses for samples received by the laboratory on 09/14/21 14:07.

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

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

Sincerely,



Will Brewington
President

Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JP-50 CLASS	21091322-001	1091424-01	Vapor	09/09/21 18:50	09/14/21 14:07
JP-41 CLASS	21091322-002	1091424-02	Vapor	09/09/21 18:54	09/14/21 14:07
JP-38 CLASS	21091322-003	1091424-03	Vapor	09/09/21 18:57	09/14/21 14:07
JP-35 HALL	21091322-004	1091424-04	Vapor	09/09/21 18:59	09/14/21 14:07
JP-RECEPTION	21091322-005	1091424-05	Vapor	09/09/21 19:04	09/14/21 14:07
JP-53 HALL	21091322-006	1091424-06	Vapor	09/09/21 19:09	09/14/21 14:07
JP-33 CLASS	21091322-007	1091424-07	Vapor	09/09/21 19:13	09/14/21 14:07
JP-26 CLASS	21091322-008	1091424-08	Vapor	09/09/21 19:16	09/14/21 14:07
JP-MULTI PURPOSE	21091322-009	1091424-09	Vapor	09/09/21 19:20	09/14/21 14:07
JP-GYM	21091322-010	1091424-10	Vapor	09/09/21 19:24	09/14/21 14:07
JP-22 BAND	21091322-011	1091424-11	Vapor	09/09/21 19:04	09/14/21 14:07
JP-LIBRARY	21091322-012	1091424-12	Vapor	09/09/21 19:07	09/14/21 14:07
JP-ROOM 14	21091322-013	1091424-13	Vapor	09/09/21 19:11	09/14/21 14:07
JP-ROOM 1	21091322-014	1091424-14	Vapor	09/09/21 19:18	09/14/21 14:07
JP-OUTDOOR	21091322-015	1091424-15	Vapor	09/09/21 19:21	09/14/21 14:07



Will Brewington, President

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

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

Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-50 CLASS
21091322-001
1091424-01 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	43.4		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 03:12	CMK
Benzene	0.38	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 03:12	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 03:12	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:12	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 03:12	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 03:12	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 03:12	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 03:12	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:12	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 03:12	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 03:12	CMK
Chloroform	2.25		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 03:12	CMK
Chloromethane	1.18		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 03:12	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 03:12	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 03:12	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:12	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 03:12	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:12	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:12	CMK
1,4-Dichlorobenzene	0.36	J	ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:12	CMK
Dichlorodifluoromethane	2.03		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 03:12	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 03:12	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 03:12	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:12	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:12	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:12	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 03:12	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 03:12	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 03:12	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 03:12	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 03:12	CMK
Ethylbenzene	0.39	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:12	CMK
4-Ethyltoluene	0.25	J	ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:12	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 03:12	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-50 CLASS
21091322-001
1091424-01 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 03:12	CMK
n-Heptane	1.39		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 03:12	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 03:12	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 03:12	CMK
2-Hexanone	0.33	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 03:12	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 03:12	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 03:12	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 03:12	CMK
Methyl ethyl ketone (2-Butanone)	2.01		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 03:12	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 03:12	CMK
Naphthalene	2.83		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 03:12	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 03:12	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 03:12	CMK
Styrene	0.72	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 03:12	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 03:12	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 03:12	CMK
Tetrahydrofuran	0.71		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 03:12	CMK
Toluene	3.05		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 03:12	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 03:12	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:12	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:12	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:12	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:12	CMK
1,2,4-Trimethylbenzene	0.29	J	ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:12	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:12	CMK
2,2,4-Trimethylpentane	0.37	J	ug/m ³	0.93	0.23	1	09/17/21	09/18/21 03:12	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 03:12	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:12	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 03:12	CMK
o-Xylene	0.39	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:12	CMK
m- & p-Xylenes	1.00	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 03:12	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>				73-115	100 %		09/17/21	09/18/21 03:12	

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-41 CLASS
21091322-002
1091424-02 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	14.0		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 03:46	CMK
Benzene	0.32	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 03:46	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 03:46	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:46	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 03:46	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 03:46	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 03:46	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 03:46	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:46	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 03:46	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 03:46	CMK
Chloroform	0.63	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 03:46	CMK
Chloromethane	1.01		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 03:46	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 03:46	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 03:46	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 03:46	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 03:46	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:46	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:46	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 03:46	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 03:46	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 03:46	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 03:46	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:46	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:46	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 03:46	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 03:46	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 03:46	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 03:46	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 03:46	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 03:46	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:46	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:46	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 03:46	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-41 CLASS
21091322-002
1091424-02 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 03:46	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 03:46	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 03:46	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 03:46	CMK
2-Hexanone	ND		ug/m ³	0.82	0.15	1	09/17/21	09/18/21 03:46	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 03:46	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 03:46	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 03:46	CMK
Methyl ethyl ketone (2-Butanone)	1.15		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 03:46	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 03:46	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 03:46	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 03:46	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 03:46	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 03:46	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 03:46	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 03:46	CMK
Tetrahydrofuran	0.18	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 03:46	CMK
Toluene	1.47		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 03:46	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 03:46	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:46	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:46	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:46	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 03:46	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:46	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 03:46	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 03:46	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 03:46	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:46	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 03:46	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 03:46	CMK
m- & p-Xylenes	0.43	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 03:46	CMK
Surrogate: 4-Bromofluorobenzene				73-115	95 %		09/17/21	09/18/21 03:46	



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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-38 CLASS
21091322-003
1091424-03 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	15.1		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 04:20	CMK
Benzene	0.29	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 04:20	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 04:20	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:20	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 04:20	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 04:20	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 04:20	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 04:20	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:20	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 04:20	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 04:20	CMK
Chloroform	0.54	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 04:20	CMK
Chloromethane	1.01		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 04:20	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 04:20	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 04:20	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:20	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 04:20	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:20	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:20	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:20	CMK
Dichlorodifluoromethane	2.18		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 04:20	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 04:20	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 04:20	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:20	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:20	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:20	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 04:20	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 04:20	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 04:20	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 04:20	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 04:20	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:20	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:20	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 04:20	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-38 CLASS
21091322-003
1091424-03 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 04:20	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 04:20	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 04:20	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 04:20	CMK
2-Hexanone	0.16	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 04:20	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 04:20	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 04:20	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 04:20	CMK
Methyl ethyl ketone (2-Butanone)	1.03		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 04:20	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 04:20	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 04:20	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 04:20	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 04:20	CMK
Styrene	0.17	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 04:20	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 04:20	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 04:20	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 04:20	CMK
Toluene	1.51		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 04:20	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 04:20	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:20	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:20	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:20	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:20	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:20	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:20	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 04:20	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 04:20	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:20	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 04:20	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:20	CMK
m- & p-Xylenes	0.43	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 04:20	CMK
Surrogate: 4-Bromofluorobenzene			73-115	95 %	09/17/21		09/18/21 04:20		

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-35 HALL
21091322-004
1091424-04 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	16.1		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 04:54	CMK
Benzene	0.29	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 04:54	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 04:54	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:54	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 04:54	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 04:54	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 04:54	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 04:54	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:54	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 04:54	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 04:54	CMK
Chloroform	0.88	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 04:54	CMK
Chloromethane	0.99		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 04:54	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 04:54	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 04:54	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 04:54	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 04:54	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:54	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:54	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 04:54	CMK
Dichlorodifluoromethane	2.23		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 04:54	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 04:54	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 04:54	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:54	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:54	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 04:54	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 04:54	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 04:54	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 04:54	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 04:54	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 04:54	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:54	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:54	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 04:54	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-35 HALL
21091322-004
1091424-04 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 04:54	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 04:54	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 04:54	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 04:54	CMK
2-Hexanone	0.20	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 04:54	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 04:54	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 04:54	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 04:54	CMK
Methyl ethyl ketone (2-Butanone)	1.09		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 04:54	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 04:54	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 04:54	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 04:54	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 04:54	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 04:54	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 04:54	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 04:54	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 04:54	CMK
Toluene	1.66		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 04:54	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 04:54	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:54	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:54	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:54	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 04:54	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:54	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 04:54	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 04:54	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 04:54	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:54	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 04:54	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 04:54	CMK
m- & p-Xylenes	ND		ug/m ³	1.70	0.43	1	09/17/21	09/18/21 04:54	CMK

Surrogate: 4-Bromofluorobenzene 73-115 94 % 09/17/21 09/18/21 04:54

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-RECEPTION
21091322-005
1091424-05 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	17.9		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 05:28	CMK
Benzene	0.32	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 05:28	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 05:28	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 05:28	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 05:28	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 05:28	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 05:28	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 05:28	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 05:28	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 05:28	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 05:28	CMK
Chloroform	2.44		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 05:28	CMK
Chloromethane	1.07		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 05:28	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 05:28	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 05:28	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 05:28	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 05:28	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 05:28	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 05:28	CMK
1,4-Dichlorobenzene	0.30	J	ug/m ³	1.20	0.30	1	09/17/21	09/18/21 05:28	CMK
Dichlorodifluoromethane	2.23		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 05:28	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 05:28	CMK
1,2-Dichloroethane	1.01		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 05:28	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 05:28	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 05:28	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 05:28	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 05:28	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 05:28	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 05:28	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 05:28	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 05:28	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 05:28	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 05:28	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 05:28	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-RECEPTION
21091322-005
1091424-05 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 05:28	CMK
n-Heptane	0.25	J	ug/m ³	0.82	0.21	1	09/17/21	09/18/21 05:28	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 05:28	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 05:28	CMK
2-Hexanone	0.20	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 05:28	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 05:28	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 05:28	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 05:28	CMK
Methyl ethyl ketone (2-Butanone)	1.09		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 05:28	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 05:28	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 05:28	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 05:28	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 05:28	CMK
Styrene	0.30	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 05:28	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 05:28	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 05:28	CMK
Tetrahydrofuran	0.18	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 05:28	CMK
Toluene	2.45		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 05:28	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 05:28	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 05:28	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 05:28	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 05:28	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 05:28	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 05:28	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 05:28	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 05:28	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 05:28	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 05:28	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 05:28	CMK
o-Xylene	0.30	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 05:28	CMK
m- & p-Xylenes	0.69	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 05:28	CMK
Surrogate: 4-Bromofluorobenzene			73-115	95 %	09/17/21		09/18/21 05:28		



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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-53 HALL
21091322-006
1091424-06 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	23.7		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 06:02	CMK
Benzene	0.32	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 06:02	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 06:02	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:02	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 06:02	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 06:02	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 06:02	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 06:02	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:02	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 06:02	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 06:02	CMK
Chloroform	1.03		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 06:02	CMK
Chloromethane	1.07		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 06:02	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 06:02	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 06:02	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:02	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 06:02	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:02	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:02	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:02	CMK
Dichlorodifluoromethane	2.18		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 06:02	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 06:02	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 06:02	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:02	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:02	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:02	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 06:02	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 06:02	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 06:02	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 06:02	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 06:02	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:02	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:02	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 06:02	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-53 HALL
21091322-006
1091424-06 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 06:02	CMK
n-Heptane	0.33	J	ug/m ³	0.82	0.21	1	09/17/21	09/18/21 06:02	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 06:02	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 06:02	CMK
2-Hexanone	0.20	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 06:02	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 06:02	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 06:02	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 06:02	CMK
Methyl ethyl ketone (2-Butanone)	1.27		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 06:02	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 06:02	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 06:02	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 06:02	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 06:02	CMK
Styrene	0.26	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 06:02	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 06:02	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 06:02	CMK
Tetrahydrofuran	0.29	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 06:02	CMK
Toluene	2.34		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 06:02	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 06:02	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:02	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:02	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:02	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:02	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:02	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:02	CMK
2,2,4-Trimethylpentane	0.33	J	ug/m ³	0.93	0.23	1	09/17/21	09/18/21 06:02	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 06:02	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:02	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 06:02	CMK
o-Xylene	0.26	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:02	CMK
m- & p-Xylenes	0.56	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 06:02	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>				73-115	96 %		09/17/21	09/18/21 06:02	

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-33 CLASS
21091322-007
1091424-07 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	18.7		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 06:36	CMK
Benzene	0.26	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 06:36	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 06:36	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:36	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 06:36	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 06:36	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 06:36	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 06:36	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:36	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 06:36	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 06:36	CMK
Chloroform	0.88	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 06:36	CMK
Chloromethane	1.03		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 06:36	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 06:36	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 06:36	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 06:36	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 06:36	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:36	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:36	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 06:36	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 06:36	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 06:36	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 06:36	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:36	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:36	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 06:36	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 06:36	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 06:36	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 06:36	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 06:36	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 06:36	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:36	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:36	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 06:36	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-33 CLASS
21091322-007
1091424-07 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 06:36	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 06:36	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 06:36	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 06:36	CMK
2-Hexanone	0.16	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 06:36	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 06:36	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 06:36	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 06:36	CMK
Methyl ethyl ketone (2-Butanone)	0.97		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 06:36	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 06:36	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 06:36	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 06:36	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 06:36	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 06:36	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 06:36	CMK
Tetrachloroethene	1.97		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 06:36	CMK
Tetrahydrofuran	0.18	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 06:36	CMK
Toluene	2.68		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 06:36	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 06:36	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:36	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:36	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:36	CMK
Trichlorofluoromethane (Freon 11)	1.35		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 06:36	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:36	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 06:36	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 06:36	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 06:36	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:36	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 06:36	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 06:36	CMK
m- & p-Xylenes	0.52	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 06:36	CMK
Surrogate: 4-Bromofluorobenzene			73-115	95 %	09/17/21		09/18/21 06:36		

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-26 CLASS
21091322-008
1091424-08 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	16.7		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 07:10	CMK
Benzene	0.29	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 07:10	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 07:10	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:10	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 07:10	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 07:10	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 07:10	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 07:10	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:10	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 07:10	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 07:10	CMK
Chloroform	1.61		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 07:10	CMK
Chloromethane	1.03		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 07:10	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 07:10	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 07:10	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:10	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 07:10	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:10	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:10	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:10	CMK
Dichlorodifluoromethane	2.32		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 07:10	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 07:10	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 07:10	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:10	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:10	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:10	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 07:10	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 07:10	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 07:10	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 07:10	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 07:10	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:10	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:10	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 07:10	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-26 CLASS
21091322-008
1091424-08 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 07:10	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 07:10	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 07:10	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 07:10	CMK
2-Hexanone	ND		ug/m ³	0.82	0.15	1	09/17/21	09/18/21 07:10	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 07:10	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 07:10	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 07:10	CMK
Methyl ethyl ketone (2-Butanone)	1.24		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 07:10	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 07:10	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 07:10	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 07:10	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 07:10	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 07:10	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 07:10	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 07:10	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 07:10	CMK
Toluene	10.7		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 07:10	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 07:10	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:10	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:10	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:10	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:10	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:10	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:10	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 07:10	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 07:10	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:10	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 07:10	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:10	CMK
m- & p-Xylenes	ND		ug/m ³	1.70	0.43	1	09/17/21	09/18/21 07:10	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>				73-115	96 %		09/17/21	09/18/21 07:10	



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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-MULTI PURPOSE
21091322-009
1091424-09 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	19.9		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 07:44	CMK
Benzene	0.45	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 07:44	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 07:44	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:44	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 07:44	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 07:44	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 07:44	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 07:44	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:44	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 07:44	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 07:44	CMK
Chloroform	1.12		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 07:44	CMK
Chloromethane	1.09		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 07:44	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 07:44	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 07:44	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 07:44	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 07:44	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:44	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:44	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 07:44	CMK
Dichlorodifluoromethane	2.23		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 07:44	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 07:44	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 07:44	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:44	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:44	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 07:44	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 07:44	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 07:44	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 07:44	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 07:44	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 07:44	CMK
Ethylbenzene	0.26	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:44	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:44	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 07:44	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-MULTI PURPOSE
21091322-009
1091424-09 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 07:44	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 07:44	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 07:44	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 07:44	CMK
2-Hexanone	0.29	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 07:44	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 07:44	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 07:44	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 07:44	CMK
Methyl ethyl ketone (2-Butanone)	1.98		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 07:44	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 07:44	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 07:44	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 07:44	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 07:44	CMK
Styrene	0.17	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 07:44	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 07:44	CMK
Tetrachloroethene	0.75	J	ug/m ³	1.40	0.70	1	09/17/21	09/18/21 07:44	CMK
Tetrahydrofuran	0.21	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 07:44	CMK
Toluene	2.37		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 07:44	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 07:44	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:44	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:44	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:44	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 07:44	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:44	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 07:44	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 07:44	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 07:44	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:44	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 07:44	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 07:44	CMK
m- & p-Xylenes	0.61	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 07:44	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>			73-115	94 %	09/17/21	09/18/21 07:44			

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-GYM
21091322-010
1091424-10 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	20.6		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 08:18	CMK
Benzene	0.38	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 08:18	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 08:18	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:18	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 08:18	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 08:18	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 08:18	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 08:18	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:18	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 08:18	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 08:18	CMK
Chloroform	1.66		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 08:18	CMK
Chloromethane	1.05		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 08:18	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 08:18	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 08:18	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:18	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 08:18	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:18	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:18	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:18	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 08:18	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 08:18	CMK
1,2-Dichloroethane	0.40	J	ug/m ³	0.81	0.20	1	09/17/21	09/18/21 08:18	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:18	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:18	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:18	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 08:18	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 08:18	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 08:18	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 08:18	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 08:18	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:18	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:18	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 08:18	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-GYM
21091322-010
1091424-10 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 08:18	CMK
n-Heptane	0.25	J	ug/m ³	0.82	0.21	1	09/17/21	09/18/21 08:18	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 08:18	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 08:18	CMK
2-Hexanone	0.20	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 08:18	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 08:18	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 08:18	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 08:18	CMK
Methyl ethyl ketone (2-Butanone)	1.15		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 08:18	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 08:18	CMK
Naphthalene	0.79	J	ug/m ³	1.10	0.70	1	09/17/21	09/18/21 08:18	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 08:18	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 08:18	CMK
Styrene	0.26	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 08:18	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 08:18	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 08:18	CMK
Tetrahydrofuran	0.32	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 08:18	CMK
Toluene	2.34		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 08:18	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 08:18	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:18	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:18	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:18	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:18	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:18	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:18	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 08:18	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 08:18	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:18	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 08:18	CMK
o-Xylene	0.26	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:18	CMK
m- & p-Xylenes	0.65	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 08:18	CMK
Surrogate: 4-Bromofluorobenzene		73-115		95 %			09/17/21	09/18/21 08:18	



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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-22 BAND
21091322-011
1091424-11 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatiles Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	15.7		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 08:52	CMK
Benzene	0.29	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 08:52	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 08:52	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:52	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 08:52	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 08:52	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 08:52	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 08:52	CMK
Carbon tetrachloride	0.44	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:52	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 08:52	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 08:52	CMK
Chloroform	0.93	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 08:52	CMK
Chloromethane	1.14		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 08:52	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 08:52	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 08:52	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 08:52	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 08:52	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:52	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:52	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 08:52	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 08:52	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 08:52	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 08:52	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:52	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:52	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 08:52	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 08:52	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 08:52	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 08:52	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 08:52	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 08:52	CMK
Ethylbenzene	0.26	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:52	CMK
4-Ethyltoluene	0.29	J	ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:52	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 08:52	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-22 BAND
21091322-011
1091424-11 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 08:52	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 08:52	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 08:52	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 08:52	CMK
2-Hexanone	0.20	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 08:52	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 08:52	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 08:52	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 08:52	CMK
Methyl ethyl ketone (2-Butanone)	1.27		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 08:52	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 08:52	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 08:52	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 08:52	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 08:52	CMK
Styrene	0.21	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 08:52	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 08:52	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 08:52	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 08:52	CMK
Toluene	2.15		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 08:52	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 08:52	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:52	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:52	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:52	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 08:52	CMK
1,2,4-Trimethylbenzene	0.34	J	ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:52	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 08:52	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 08:52	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 08:52	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:52	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 08:52	CMK
o-Xylene	0.35	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 08:52	CMK
m- & p-Xylenes	0.74	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 08:52	CMK
Surrogate: 4-Bromofluorobenzene			73-115	95 %			09/17/21	09/18/21 08:52	

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-LIBRARY
21091322-012
1091424-12 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	15.0		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 09:26	CMK
Benzene	0.26	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 09:26	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 09:26	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 09:26	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 09:26	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 09:26	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 09:26	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 09:26	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 09:26	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 09:26	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 09:26	CMK
Chloroform	0.73	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 09:26	CMK
Chloromethane	1.12		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 09:26	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 09:26	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 09:26	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 09:26	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 09:26	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 09:26	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 09:26	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 09:26	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 09:26	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 09:26	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 09:26	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 09:26	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 09:26	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 09:26	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 09:26	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 09:26	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 09:26	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 09:26	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 09:26	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 09:26	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 09:26	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 09:26	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-LIBRARY
21091322-012
1091424-12 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 09:26	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 09:26	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 09:26	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 09:26	CMK
2-Hexanone	0.16	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 09:26	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 09:26	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 09:26	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 09:26	CMK
Methyl ethyl ketone (2-Butanone)	0.94		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 09:26	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 09:26	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 09:26	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 09:26	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 09:26	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 09:26	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 09:26	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 09:26	CMK
Tetrahydrofuran	0.18	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 09:26	CMK
Toluene	1.43		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 09:26	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 09:26	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 09:26	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 09:26	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 09:26	CMK
Trichlorofluoromethane (Freon 11)	1.29		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 09:26	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 09:26	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 09:26	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 09:26	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 09:26	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 09:26	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 09:26	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 09:26	CMK
m- & p-Xylenes	0.48	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 09:26	CMK
Surrogate: 4-Bromofluorobenzene				73-115	95 %		09/17/21	09/18/21 09:26	

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-ROOM 14
21091322-013
1091424-13 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	14.8		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 10:00	CMK
Benzene	0.26	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 10:00	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 10:00	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:00	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 10:00	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 10:00	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 10:00	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 10:00	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:00	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 10:00	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 10:00	CMK
Chloroform	2.64		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 10:00	CMK
Chloromethane	0.95		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 10:00	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 10:00	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 10:00	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:00	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 10:00	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:00	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:00	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:00	CMK
Dichlorodifluoromethane	2.27		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 10:00	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 10:00	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 10:00	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:00	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:00	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:00	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 10:00	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 10:00	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 10:00	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 10:00	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 10:00	CMK
Ethylbenzene	0.30	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:00	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:00	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 10:00	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-ROOM 14
21091322-013
1091424-13 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 10:00	CMK
n-Heptane	0.61	J	ug/m ³	0.82	0.21	1	09/17/21	09/18/21 10:00	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 10:00	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 10:00	CMK
2-Hexanone	0.16	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 10:00	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 10:00	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 10:00	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 10:00	CMK
Methyl ethyl ketone (2-Butanone)	1.18		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 10:00	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 10:00	CMK
Naphthalene	1.42		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 10:00	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 10:00	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 10:00	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 10:00	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 10:00	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 10:00	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 10:00	CMK
Toluene	10.6		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 10:00	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 10:00	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:00	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:00	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:00	CMK
Trichlorofluoromethane (Freon 11)	1.35		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:00	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:00	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:00	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 10:00	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 10:00	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:00	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 10:00	CMK
o-Xylene	0.30	J	ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:00	CMK
m- & p-Xylenes	0.83	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 10:00	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>			73-115	96 %	09/17/21		09/18/21 10:00		

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-ROOM 1
21091322-014
1091424-14 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	20.7		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 10:34	CMK
Benzene	0.32	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 10:34	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 10:34	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:34	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 10:34	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 10:34	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 10:34	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 10:34	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:34	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 10:34	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 10:34	CMK
Chloroform	10.2		ug/m ³	0.97	0.24	1	09/17/21	09/18/21 10:34	CMK
Chloromethane	1.05		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 10:34	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 10:34	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 10:34	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 10:34	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 10:34	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:34	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:34	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 10:34	CMK
Dichlorodifluoromethane	2.13		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 10:34	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 10:34	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 10:34	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:34	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:34	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 10:34	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 10:34	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 10:34	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 10:34	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 10:34	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 10:34	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:34	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:34	CMK
Freon 113	0.46	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 10:34	CMK

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-ROOM 1
21091322-014
1091424-14 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 10:34	CMK
n-Heptane	0.78	J	ug/m ³	0.82	0.21	1	09/17/21	09/18/21 10:34	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 10:34	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 10:34	CMK
2-Hexanone	0.29	J	ug/m ³	0.82	0.15	1	09/17/21	09/18/21 10:34	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 10:34	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 10:34	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 10:34	CMK
Methyl ethyl ketone (2-Butanone)	1.56		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 10:34	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 10:34	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 10:34	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 10:34	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 10:34	CMK
Styrene	0.21	J	ug/m ³	0.85	0.15	1	09/17/21	09/18/21 10:34	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 10:34	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 10:34	CMK
Tetrahydrofuran	0.21	J	ug/m ³	0.59	0.15	1	09/17/21	09/18/21 10:34	CMK
Toluene	9.87		ug/m ³	0.75	0.35	1	09/17/21	09/18/21 10:34	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 10:34	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:34	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:34	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:34	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 10:34	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:34	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 10:34	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 10:34	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 10:34	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:34	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 10:34	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 10:34	CMK
m- & p-Xylenes	0.48	J	ug/m ³	1.70	0.43	1	09/17/21	09/18/21 10:34	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>			73-115	96 %	09/17/21		09/18/21 10:34		

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Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-OUTDOOR
21091322-015
1091424-15 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep									
Acetone	11.5		ug/m ³	2.40	2.40	1	09/17/21	09/18/21 11:08	CMK
Benzene	0.26	J	ug/m ³	0.64	0.16	1	09/17/21	09/18/21 11:08	CMK
Benzyl chloride	ND		ug/m ³	1.00	0.25	1	09/17/21	09/18/21 11:08	CMK
Bromodichloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 11:08	CMK
Bromoform	ND		ug/m ³	2.10	0.53	1	09/17/21	09/18/21 11:08	CMK
Bromomethane	ND		ug/m ³	0.78	0.20	1	09/17/21	09/18/21 11:08	CMK
1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	09/17/21	09/18/21 11:08	CMK
Carbon disulfide	ND		ug/m ³	1.56	1.56	1	09/17/21	09/18/21 11:08	CMK
Carbon tetrachloride	0.50	J	ug/m ³	1.30	0.33	1	09/17/21	09/18/21 11:08	CMK
Chlorobenzene	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 11:08	CMK
Chloroethane	ND		ug/m ³	0.53	0.27	1	09/17/21	09/18/21 11:08	CMK
Chloroform	0.29	J	ug/m ³	0.97	0.24	1	09/17/21	09/18/21 11:08	CMK
Chloromethane	1.01		ug/m ³	0.41	0.10	1	09/17/21	09/18/21 11:08	CMK
3-Chloropropene	ND		ug/m ³	0.63	0.16	1	09/17/21	09/18/21 11:08	CMK
Cyclohexane	ND		ug/m ³	0.69	0.17	1	09/17/21	09/18/21 11:08	CMK
Dibromochloromethane	ND		ug/m ³	1.30	0.33	1	09/17/21	09/18/21 11:08	CMK
1,2-Dibromoethane (EDB)	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 11:08	CMK
1,2-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 11:08	CMK
1,3-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 11:08	CMK
1,4-Dichlorobenzene	ND		ug/m ³	1.20	0.30	1	09/17/21	09/18/21 11:08	CMK
Dichlorodifluoromethane	2.32		ug/m ³	0.99	0.99	1	09/17/21	09/18/21 11:08	CMK
1,1-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 11:08	CMK
1,2-Dichloroethane	ND		ug/m ³	0.81	0.20	1	09/17/21	09/18/21 11:08	CMK
1,1-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 11:08	CMK
cis-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 11:08	CMK
trans-1,2-Dichloroethene	ND		ug/m ³	0.79	0.20	1	09/17/21	09/18/21 11:08	CMK
1,2-Dichloropropane	ND		ug/m ³	0.92	0.23	1	09/17/21	09/18/21 11:08	CMK
cis-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 11:08	CMK
trans-1,3-Dichloropropene	ND		ug/m ³	0.91	0.23	1	09/17/21	09/18/21 11:08	CMK
1,4-Dioxane	ND		ug/m ³	0.72	0.18	1	09/17/21	09/18/21 11:08	CMK
Ethyl acetate	ND		ug/m ³	3.60	3.60	1	09/17/21	09/18/21 11:08	CMK
Ethylbenzene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 11:08	CMK
4-Ethyltoluene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 11:08	CMK
Freon 113	0.54	J	ug/m ³	1.50	0.38	1	09/17/21	09/18/21 11:08	CMK

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

Will Brewington, President

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

Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Reported:
09/21/21 10:46

JP-OUTDOOR
21091322-015
1091424-15 (Vapor)
Sample Date: 09/09/21

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Detection Limit (LOD)	Dilution	Prepared	Analyzed	Analyst
Volatile Organics by EPA TO-15 (GC/MS) Prepared by TO-15 Prep (continued)									
Freon 114	ND		ug/m ³	1.40	1.40	1	09/17/21	09/18/21 11:08	CMK
n-Heptane	ND		ug/m ³	0.82	0.21	1	09/17/21	09/18/21 11:08	CMK
Hexachlorobutadiene	ND		ug/m ³	2.10	2.10	1	09/17/21	09/18/21 11:08	CMK
Hexane	ND		ug/m ³	14.0	14.0	1	09/17/21	09/18/21 11:08	CMK
2-Hexanone	ND		ug/m ³	0.82	0.15	1	09/17/21	09/18/21 11:08	CMK
Isopropylbenzene (Cumene)	ND		ug/m ³	1.10	0.40	1	09/17/21	09/18/21 11:08	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.72	0.21	1	09/17/21	09/18/21 11:08	CMK
Methylene chloride	ND		ug/m ³	18.0	18.0	1	09/17/21	09/18/21 11:08	CMK
Methyl ethyl ketone (2-Butanone)	0.91		ug/m ³	0.59	0.34	1	09/17/21	09/18/21 11:08	CMK
Methyl isobutyl ketone	ND		ug/m ³	0.82	0.82	1	09/17/21	09/18/21 11:08	CMK
Naphthalene	ND		ug/m ³	1.10	0.70	1	09/17/21	09/18/21 11:08	CMK
Propene	ND		ug/m ³	0.34	0.34	1	09/17/21	09/18/21 11:08	CMK
n-Propylbenzene	ND		ug/m ³	0.98	0.40	1	09/17/21	09/18/21 11:08	CMK
Styrene	ND		ug/m ³	0.85	0.15	1	09/17/21	09/18/21 11:08	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.40	0.35	1	09/17/21	09/18/21 11:08	CMK
Tetrachloroethene	ND		ug/m ³	1.40	0.70	1	09/17/21	09/18/21 11:08	CMK
Tetrahydrofuran	ND		ug/m ³	0.59	0.15	1	09/17/21	09/18/21 11:08	CMK
Toluene	0.45	J	ug/m ³	0.75	0.35	1	09/17/21	09/18/21 11:08	CMK
1,2,4-Trichlorobenzene	ND		ug/m ³	1.50	0.38	1	09/17/21	09/18/21 11:08	CMK
1,1,1-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 11:08	CMK
1,1,2-Trichloroethane	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 11:08	CMK
Trichloroethene	ND		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 11:08	CMK
Trichlorofluoromethane (Freon 11)	1.24		ug/m ³	1.10	0.28	1	09/17/21	09/18/21 11:08	CMK
1,2,4-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 11:08	CMK
1,3,5-Trimethylbenzene	ND		ug/m ³	0.98	0.25	1	09/17/21	09/18/21 11:08	CMK
2,2,4-Trimethylpentane	ND		ug/m ³	0.93	0.23	1	09/17/21	09/18/21 11:08	CMK
Vinyl acetate	ND		ug/m ³	0.70	0.70	1	09/17/21	09/18/21 11:08	CMK
Vinyl bromide	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 11:08	CMK
Vinyl chloride	ND		ug/m ³	0.51	0.13	1	09/17/21	09/18/21 11:08	CMK
o-Xylene	ND		ug/m ³	0.87	0.22	1	09/17/21	09/18/21 11:08	CMK
m- & p-Xylenes	ND		ug/m ³	1.70	0.43	1	09/17/21	09/18/21 11:08	CMK
<i>Surrogate: 4-Bromofluorobenzene</i>				73-115	94 %		09/17/21	09/18/21 11:08	



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

Analytical Results

Project: 4920002

Project Number: [none]
Project Manager: Amber Confer

Notes and Definitions

- J Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- %-Solids Percent Solids is a supportive test and as such does not require accreditation



Will Brewington, President

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Chain of Custody Form for Subcontracted Analyses

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

W.O. No. : 21091322
Project Location : James K. Polk ES
Project Number : 4920002
Report To LOD : No

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

For Questions or issues please contact: Amber Confer

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

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21091322-001	JP - 50 Class	09/09/21	18:50	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-002	JP - 41 Class	09/09/21	18:54	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-003	JP - 38 Class	09/09/21	18:57	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-004	JP - 35 Hall	09/09/21	18:59	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-005	JP - Reception	09/09/21	19:04	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-006	JP - 53 Hall	09/09/21	19:09	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-007	JP - 33 Class	09/09/21	19:13	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-008	JP - 26 Class	09/09/21	19:16	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-009	JP - Multi Purpose	09/09/21	19:20	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-010	JP - Gym	09/09/21	19:24	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-011	JP - 22 Band	09/09/21	19:04	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-012	JP - Library	09/09/21	19:07	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-013	JP - Room 14	09/09/21	19:11	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-014	JP - Room 1	09/09/21	19:18	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON
21091322-015	JP - Outdoor	09/09/21	19:21	Air	VOCs in Air by GC/MS (subbed)	TO-15	Air Canister	NON

10914
24-01
-02
-03
-04
-05
-06
-07
-08
-09
-10
-11
-12
-13
-14
-15

Data Deliverables Required: COA

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send Invoice Attn : invoicing@phaseonline.com

Airbill No.: _____ Carrier : TUS

Condition Upon Receipt : _____

Comments :

Samples Relinquished By: [Signature] Date: 9/14/21 Time: 1720 Samples Received By: [Signature] 9/14/21 14:07

Samples Relinquished By: [Signature] Date: 09/14/21 Time: 1407 Samples Received By: [Signature]

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

Air Analysis by TO-15

Chain of Custody

Client Contact Information		Project Manager: <u>Amber Conter</u>		Carrier:		1 of 2 COCs	
Company: <u>PSS</u>		Phone:		Samplers Name(s)		Analysis Matrix	
Site Contact:							
Project Name:		Analysis Turnaround Time					
Site:		Standard (Specify) <u>5 day</u>					
PO #		Rush (Specify)					

Client Sample ID	Sample Date Start	Time Start (24 hr clock)	Sample Date Stop	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Incoming Canister Pressure ("Hg) (Lab)	Sample Regulator ID	Can ID	Can Size (L)	TO-15 FULL LIST	TO-15 ABBREVIATED LIST	Indoor / Ambient Air	Soil Gas / Subslab	Comments
21091322-001	9/9/21	1450	9/9/21	1850	29	0		14367	614	1.4	X	X			1091424 - 01
-002		1455		1854	30	0		04708	60587						- 02
-003		1500		1857	31	2		03604	609						- 03
-004		1503		1859	31	0		03911	9334						- 04
-005		1511		1904	31	0		04722	896						- 05
-006		1519		1909	31	0		10228	00590						- 06
-007		1524		1913	30	2		04446	3678						- 07
-008		1529		1916	29	0		04509	10185						- 08
-009		1538		1920	30	0		04503	3685						- 09
-010		1542		1924	29	2		10278	9332						- 10
-011		1519		1904	30	0		14366	883						- 11
-012		1525		1907	30	1		03605	3053						- 12
-013		1531		1911	31	1		14029	10189						- 13
-014	↓	1542	↓	1918	30	2		03607	573		✓	✓			- 14

Special Instructions/QC Requirements & Comments:

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:
		<i>[Signature]</i>	9/13/21 1244
Samples Relinquished by:	Date/Time:	Received by:	Date/Time:
<i>[Signature]</i>	9/14/21 1330	<i>[Signature]</i>	09/14/21, 1330
Relinquished by:	Date/Time:	Received by:	Date/Time:
<i>[Signature]</i>	09/14/21, 1407	<i>[Signature]</i>	9/14/21 14:07

Case Narrative

Project Name: ACPS IAQ testing

PSS Project No.: 21091322

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 recorded upon receipt. Pressures will be taken at subcontractor.

21091322: Analyses associated with analyst code 4010 were performed by Maryland Spectral Services, Inc., 1500 Caton Center Drive, Suite G, Baltimore, MD 21227 - VA 460156

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



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15

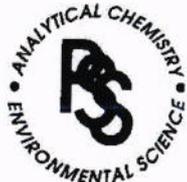
PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com

email: info@phaseonline.com

1 *CLIENT: Total Environmental Concepts, Inc. *OFFICE LOC.: Lorton *PROJECT MGR: Karl Ford EMAIL: kford@teci.pro *PHONE NO.: (703) 567-4346 *PROJECT NAME: ACPS IAQ testing PROJECT NO.: 4920002 SITE LOCATION: James K. Polk ES P.O. NO.: SAMPLER(S): Channing, Margaret						PSS Work Order #: 21091322				PAGE 1 OF 2						
						3 * (3)	Can ID *	Sample Reg. ID *	Canister Pressure * in field ("Hg) Start	Canister Pressure * in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab *	Indoor/Ambient Air *	TO-15 Full List	Special List	REMARKS
LAB #	*SAMPLE IDENTIFICATION	*DATE START	*Time Start (24hr clock)	*DATE STOP	*Time Stop (24hr clock)	Can ID *	Sample Reg. ID *	Canister Pressure * in field ("Hg) Start	Canister Pressure * in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab *	Indoor/Ambient Air *	TO-15 Full List	Special List	REMARKS	
1	JP - 50 Class	9/9/21	14:50	9/9/21	18:50	614	14367	29	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2	JP - 41 Class	9/9/21	14:55	9/9/21	18:54	00587	04708	30	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
3	JP - 38 Class	9/9/21	15:00	9/9/21	18:57	609	03604	31	2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4	JP - 35 Hall	9/9/21	15:03	9/9/21	18:59	9334	03911	31	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
5	JP - Reception	9/9/21	15:11	9/9/21	19:04	896	04722	31	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
6	JP - 53 Hall	9/9/21	15:19	9/9/21	19:09	00590	10228	31	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
7	JP - 33 Class	9/9/21	15:24	9/9/21	19:13	3678	04446	30	2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
8	JP - 26 Class	9/9/21	15:29	9/9/21	19:16	10185	04509	29	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
9	JP - Multi Purpose	9/9/21	15:38	9/9/21	19:20	3685	04503	30	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
10	JP - Gym	9/9/21	15:42	9/9/21	19:24	9332	10278	29	2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
5 Relinquished By: (1) Channing Jackson Date: 9/10/21 Time: 12:30 Received By:						4 *Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Next Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other				Shipping Carrier: Client						
Relinquished By: (2) Ted Kraus Date: 9/13/21 Time: 12:44 Received By: [Signature]						Data Deliverables Required:										
Relinquished By: (3) Date: Time: Received By:						Special Instructions:										
Relinquished 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 Concepts, Inc. *OFFICE LOC.: Lorton						PSS Work Order #: 21091322				PAGE <u>2</u> OF <u>2</u>							
*PROJECT MGR: Karl Ford						3 * Can ID *	Sample Reg. ID *	Canister Pressure * in field ("Hg) Start	Canister Pressure * in field ("Hg) Stop	Incoming Canister Pressure ("Hg) Lab	Soil Gas / Subslab *	Indoor/Ambient Air *	TO-15 Full List	Special List	REMARKS		
EMAIL: kford@teci.pro *PHONE NO.: (703) 567-4346																	
*PROJECT NAME: ACPS IAQ testing PROJECT NO.: 4920002																	
SITE LOCATION: James K. Polk ES P.O. NO.:																	
SAMPLER(S): Channing, Margaret																	
LAB #	*SAMPLE IDENTIFICATION	*DATE START	*Time Start (24hr clock)	*DATE STOP	*Time Stop (24hr clock)												
11	JP - 22 Band	9/9/21	15:19	9/9/21	19:04	883	14366	30	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
12	JP - Library	9/9/21	15:25	9/9/21	19:07	3053	03605	30	1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
13	JP - Room 14	9/9/21	15:31	9/9/21	19:11	10189	14029	31	1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
14	JP - Room 1	9/9/21	15:42	9/9/21	19:18	573	03607	30	2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
15	JP - Outdoor	9/9/21	15:46	9/9/21	19:21	9844	10505	30	0		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
5 Relinquished By: (1) Channing Jackson Date: 9/10/21 Time: 12:30 Received By:						4 *Requested TAT (One TAT per COC)				Shipping Carrier: Clm							
Relinquished By: (2) Ted Kraus Date: 9/15/21 Time: 12:45 Received By: [Signature]						<input checked="" type="checkbox"/> 5-Day Next Day				<input type="checkbox"/> 3-Day Emergency				<input type="checkbox"/> 2-Day Other			
Relinquished By: (3) Date: Time: Received By:						Data Deliverables Required:											
Relinquished By: (4) Date: Time: Received By:						Special Instructions:											

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

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Sample Receipt Checklist

Project Name: ACPS IAQ testing

PSS Project No.: 21091322

Client Name	Total Environmental Concepts - Lortc	Received By	Thomas Wingate
Disposal Date	10/18/2021	Date Received	09/13/2021 12:44:00 PM
		Delivered By	Client
		Tracking No	Not Applicable
		Logged In By	Thomas Wingate

Shipping Container(s)

No. of Coolers 0

Custody Seal(s) Intact? N/A
 Seal(s) Signed / Dated? N/A

Ice N/A
 Temp (deg C)
 Temp Blank Present No

Documentation

COC agrees with sample labels? Yes
 Chain of Custody Yes

Sampler Name Channing, Margaret
 MD DW Cert. No. N/A

Sample Container

Appropriate for Specified Analysis? Yes
 Intact? Yes
 Labeled and Labels Legible? Yes

Custody Seal(s) Intact? Not Applicable
 Seal(s) Signed / Dated Not Applicable

Holding Time

All Samples Received Within Holding Time(s)? Yes

Total No. of Samples Received 15
 Total No. of Containers Received 15

Preservation

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

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

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

Soil gas indoor air not indicated on COC; samples are indoor air.
 Incoming pressures not recorded upon receipt. Pressures will be taken at subcontractor.

Samples Inspected/Checklist Completed By:



Thomas Wingate

Date: 09/13/2021

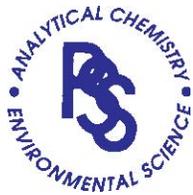
PM Review and Approval:



Amber J. Cooper

Date: 09/13/2021

Version 1.000



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM TO-15

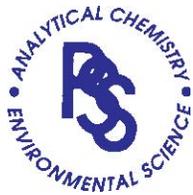
PHASE SEPARATION SCIENCE, INC.

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

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

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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

Appendix D: Formaldehyde Analytical Results

Project Name: ACPS IAQ Testing
PSS Project No.: 21091315

September 21, 2021

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



Reference: PSS Project No: **21091315**
Project Name: ACPS IAQ Testing
Project Location: James K. Polk ES
Project ID.: 4920002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21091315**.

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



Project Name: ACPS IAQ Testing
PSS Project No.: 21091315

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
21091315-001	JP- Library	AIR	09/09/21 00:00
21091315-002	JP- 41 Class	AIR	09/09/21 00:00
21091315-003	JP- 22 Class/Band	AIR	09/09/21 00:00
21091315-004	JP- Room 1	AIR	09/09/21 00:00
21091315-005	JP- Gym	AIR	09/09/21 00:00
21091315-006	JP- 14 Class	AIR	09/09/21 00:00
21091315-007	JP- 50 Class	AIR	09/09/21 00:00
21091315-008	JP- 38 Class	AIR	09/09/21 00:00
21091315-009	JP- Reception	AIR	09/09/21 00:00
21091315-010	JP- Hall 107	AIR	09/09/21 00:00
21091315-011	JP- Hall 35	AIR	09/09/21 00:00
21091315-012	JP- 33 Class	AIR	09/09/21 00:00
21091315-013	JP- Multi Purpose	AIR	09/09/21 00:00
21091315-014	JP- Hall 53	AIR	09/09/21 00:00
21091315-015	JP- 26 Class	AIR	09/09/21 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 contaminants, and part 141.3, for the secondary drinking water contaminants.
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

Project Name: ACPS IAQ Testing

PSS Project No.: 21091315

Standard Flags/Abbreviations:

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

Certifications:

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

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

September 21, 2021

Account# 15354

Login# L546486

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**

Enclosure(s)

Terms and Conditions & General Disclaimers

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

Analytical Disclaimers

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

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

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

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

Legend

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



GALSON

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. Account No.: 15354
 Site : JAMES K. POLK ES Login No. : L546486
 Project No. : ACPS IAQ TESTING-4920002
 Date Sampled : 09-SEP-21 Date Analyzed : 15-SEP-21
 Date Received : 14-SEP-21 Report ID : 1265194

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mcg/m3</u>	<u>ppm</u>
JP-LIBRARY	L546486-1	222	<0.4	<0.02	<0.01
JP-41 CLASS	L546486-2	242	<0.4	<0.01	<0.01
JP-22 CLASS/BAND	L546486-3	225	<0.4	<0.01	<0.01
JP-ROOM 1	L546486-4	216	<0.4	<0.02	<0.01
JP-GYM	L546486-5	222	<0.4	<0.02	<0.01
JP-14 CLASS	L546486-6	220	<0.4	<0.02	<0.01
JP-50 CLASS	L546486-7	245	<0.4	<0.01	<0.01
JP-38 CLASS	L546486-8	237	<0.4	<0.01	<0.01
JP-RECEPTION	L546486-9	233	<0.4	<0.01	<0.01
JP-HALL 107	L546486-10	218	<0.4	<0.02	<0.01
JP-HALL 35	L546486-11	236	<0.4	<0.01	<0.01
JP-33 CLASS	L546486-12	229	<0.4	<0.01	<0.01
JP-MULIT PURPOSE	L546486-13	222	<0.4	<0.02	<0.01
JP-HALL 53	L546486-14	230	<0.4	<0.01	<0.01
JP-26 CLASS	L546486-15	227	<0.4	<0.01	<0.01

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

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

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

Approved by: NKP



GALSON

LABORATORY FOOTNOTE REPORT

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

Client Name : Phase Separation Science, Inc.
Site : JAMES K. POLK ES
Project No. : ACPS IAQ TESTING-4920002

Date Sampled : 09-SEP-21 Account No.: 15354
Date Received: 14-SEP-21 Login No. : L546486
Date Analyzed: 15-SEP-21

L546486 (Report ID: 1265194):

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)

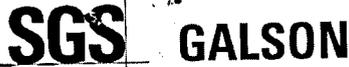
L546486 (Report ID: 1265194):

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%

LS46486

21091315



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

Client Account No.*: _____

Phone No.* : 410-747-8770
 Cell No. : _____

Email Results to : Amber Confer
 Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science

Phone No.: 410-747-8770
 Email : invoicing@phaseonline.com
 P.O. No. : ODC 4920002-001
 Credit Card : Card on File Call for Credit Card Info.

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

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

Need Results By:	(surcharge)
<input checked="" type="checkbox"/> Standard	0%
<input type="checkbox"/> 4 Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

Site Name : James K. Polk ES Project : ACPS IAQ testing - 4920002 Sampled by: Karl Ford

Comments :
Dosimeter cartridge # noted in the (Hexavalent Chromium Process) colum

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

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

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

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JP - Library	09/09/21	Assay N581 Aldehyde Badge	222	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5199
JP - 41 Class	09/09/21	Assay N581 Aldehyde Badge	242	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5508
JP - 22 Class / <u>Band</u>	09/09/21	Assay N581 Aldehyde Badge	225	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5989
JP - Room 1	09/09/21	Assay N581 Aldehyde Badge	216	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5109
JP - Gym	09/09/21	Assay N581 Aldehyde Badge	222	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5330
JP - 14 Class	09/09/21	Assay N581 Aldehyde Badge	220	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4578
JP - 50 Class	09/09/21	Assay N581 Aldehyde Badge	245	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4593
JP - 38 Class	09/09/21	Assay N581 Aldehyde Badge	237	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4989
JP - Reception	09/09/21	Assay N581 Aldehyde Badge	233	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4973
JP - Hall 107	09/09/21	Assay N581 Aldehyde Badge	218	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5089
JP - Hall 35	09/09/21	Assay N581 Aldehyde Badge	236	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5494

^Galson 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	Print Name/Signature	Date	Time
Relinquished by:	<u>Channing Jackson</u>	<u>09/10/21</u>	<u>13:30</u>	Received by:		
Relinquished by:	<u>Ted Kraus</u>	<u>9/13/21</u>	<u>12:47</u>	Received by:	<u>Amber Confer</u>	<u>9/13/21 12:42</u>

Samples received after 3pm will be considered as next day's business Page 1 of 2

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



Chain of Custody Form for Subcontracted Analyses

36
37

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

W.O. No. : 21091315
Project Location : James K. Polk ES
Project Number : 4920002
Report To LOD : No

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

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21091315-001	JP- Library	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-002	JP- 41 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-003	JP- 22 Class/Band	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-004	JP- Room 1	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-005	JP- Gym	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-006	JP- 14 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-007	JP- 50 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-008	JP- 38 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-009	JP- Reception	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-010	JP- Hall 107	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-011	JP- Hall 35	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-012	JP- 33 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-013	JP- Multi Purpose	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-014	JP- Hall 53	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON
21091315-015	JP- 26 Class	09/09/21	00:00	Air	Formaldehyde (mod. OSHA 1007; HPLC/UV)	VARIOUS	NONSC	NON

all
581
8/9/14/21

Data Deliverables Required: COA

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send Invoice Attn : invoicing@phaseonline.com

Airbill No. : _____ Carrier : UPS

Condition Upon Receipt : _____

Comments : _____

122313E40166036170
Date: 09/14/21
Shipper: UPS
Initials: MAK
Prep: UNKNOWN



Samples Relinquished By : Amber Confer Date : 9/13/21 Time : _____ Samples Received By : _____

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

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

Page 7 of 7 Report Reference: 1 Generated by: Michelle Kravice 9/14/21

Case Narrative

Project Name: ACPS IAQ Testing

PSS Project No.: 21091315

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.



New Client? Report To* : Phase Separation Science
 6630 Baltimore National Pike
 Client Account No.*: Baltimore, MD 21228
 Phone No.* : 410-747-8770
 Cell No. :
 Email Results to : Amber Confer
 Email address: reporting@phaseonline.com

Invoice To* : Phase Separation Science
 Phone No.: 410-747-8770
 Email : invoicing@phaseonline.com
 P.O. No. : ODC 4920002-001
 Credit Card : Card on File Call for Credit Card Info.

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

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

Need Results By:	(surcharge)
<input checked="" type="checkbox"/> Standard	0%
<input type="checkbox"/> 4 Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

Site Name : James K. Polk ES Project : ACPS IAQ testing - 4920002 Sampled by : Karl Ford
 Comments :
 Dosimeter cartridge # noted in the (Hexavalent Chromium Process) column
 List description of industry or Process/interferences present in sampling area :
 Public grade school building
 State samples were collected in (e.g., NY):
 VA
 Please indicate which OEL this data will be used for :
 OSHA PEL ACGIH TLV Cal OSHA
 MSHA Other (specify):

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units* L, ml, min, in2, cm2, ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JP - Library	09/09/21	Assay N581 Aldehyde Badge	222	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5199
JP - 41 Class	09/09/21	Assay N581 Aldehyde Badge	242	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5508
JP - 22 Class / Band	09/09/21	Assay N581 Aldehyde Badge	225	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5989
JP - Room 1	09/09/21	Assay N581 Aldehyde Badge	216	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5109
JP - Gym	09/09/21	Assay N581 Aldehyde Badge	222	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5330
JP - 14 Class	09/09/21	Assay N581 Aldehyde Badge	220	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4578
JP - 50 Class	09/09/21	Assay N581 Aldehyde Badge	245	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4593
JP - 38 Class	09/09/21	Assay N581 Aldehyde Badge	237	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4989
JP - Reception	09/09/21	Assay N581 Aldehyde Badge	233	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD4973
JP - Hall 107	09/09/21	Assay N581 Aldehyde Badge	218	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5089
JP - Hall 35	09/09/21	Assay N581 Aldehyde Badge	236	Min	Formaldehyde	mod. OSHA 1007: TPLC/UV	PD5494

^Galson 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	Print Name/Signature	Date	Time
Relinquished by :	Channing Jackson	09/10/21	13:30	Received by :		
Relinquished by :	Ted Kraus	9/13/21	12:47	Received by :	Amber Confer	9/13/21 12:42

21091315

Sample Receipt Checklist

Project Name: ACPS IAQ Testing

PSS Project No.: 21091315

Client Name	Total Environmental Concepts - Lortc	Received By	Amber Confer
Disposal Date	10/18/2021	Date Received	09/13/2021 12:42:00 PM
		Delivered By	Client
		Tracking No	Not Applicable
		Logged In By	Amber Confer

Shipping Container(s)

No. of Coolers 0

Custody Seal(s) Intact? N/A
 Seal(s) Signed / Dated? N/A

Ice N/A
 Temp (deg C)
 Temp Blank Present No

Documentation

COC agrees with sample labels? Yes
 Chain of Custody Yes

Sampler Name Karl Ford
 MD DW Cert. No. N/A

Sample Container

Appropriate for Specified Analysis? Yes
 Intact? Yes
 Labeled and Labels Legible? Yes

Custody Seal(s) Intact? Not Applicable
 Seal(s) Signed / Dated Not Applicable

Holding Time

All Samples Received Within Holding Time(s)? Yes

Total No. of Samples Received 15
 Total No. of Containers Received 15

Preservation

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

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

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

Samples Inspected/Checklist Completed By:

Amber Confer
 Amber Confer

Date: 09/13/2021

PM Review and Approval:

Lynn Jackson
 Lynn Jackson
 Page 14 of 14

Date: 09/13/2021

Appendix E: 4-PCH Analytical Results

Project Name: ACPS IAQ Testing
PSS Project No.: 21091314

September 21, 2021

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



Reference: PSS Project No: **21091314**
Project Name: ACPS IAQ Testing
Project Location: Jakes K. Polk ES
Project ID.: 4920002

Dear Karl Ford:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **21091314**.

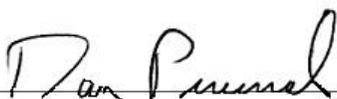
All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis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



Project Name: ACPS IAQ Testing
PSS Project No.: 21091314

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
21091314-001	JP-Library	AIR	09/09/21 00:00
21091314-002	JP-41 Class	AIR	09/09/21 00:00
21091314-003	JP-22 Class/Band	AIR	09/09/21 00:00
21091314-004	JP-Room 1	AIR	09/09/21 00:00
21091314-005	JP-Gym	AIR	09/09/21 00:00
21091314-006	JP-Class 14	AIR	09/09/21 00:00
21091314-007	JP-Class 50	AIR	09/09/21 00:00
21091314-008	JP-Class 38	AIR	09/09/21 00:00
21091314-009	JP-Reception	AIR	09/09/21 00:00
21091314-010	JP-Hall 107	AIR	09/09/21 00:00
21091314-011	JP-Hall 35	AIR	09/09/21 00:00
21091314-012	JP-Class 33	AIR	09/09/21 00:00
21091314-013	JP-Multi Purpose	AIR	09/09/21 00:00
21091314-014	JP-Hall 53	AIR	09/09/21 00:00
21091314-015	JP-Class 26	AIR	09/09/21 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 contaminants, and part 141.3, for the secondary drinking water contaminants.
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

Project Name: ACPS IAQ Testing

PSS Project No.: 21091314

Standard Flags/Abbreviations:

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

Certifications:

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

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

September 21, 2021

Account# 15354

Login# L546497

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

Enclosure(s)

Terms and Conditions & General Disclaimers

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

Analytical Disclaimers

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

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

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

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

Legend

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



GALSON

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. Account No.: 15354
 Site : JAMES K. POLK ES Login No. : L546497
 Project No. : ACPS IAQ TESTING - 4920002
 Date Sampled : 09-SEP-21 Date Analyzed : 17-SEP-21
 Date Received : 14-SEP-21 Report ID : 1265461

4-Phenylcyclohexene (4PCH low LOQ)

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc mg/m3	ppm
JP - LIBRARY	L546497-1	44.4	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - 41 CLASS	L546497-2	48.4	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - 22 CLASS/BAND	L546497-3	45	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - ROOM 1	L546497-4	43.2	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - GYM	L546497-5	44.4	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - CLASS 14	L546497-6	44	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - CLASS 50	L546497-7	49	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - CLASS 38	L546497-8	47.4	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - RECEPTION	L546497-9	46.6	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - HALL 107	L546497-10	43.6	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - HALL 35	L546497-11	47.2	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - CLASS 33	L546497-12	45.8	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - MULTI PURPOSE	L546497-13	44.4	<0.2	<0.2	<0.2	<0.005	<0.0007
JP - HALL 53	L546497-14	46	<0.2	<0.2	<0.2	<0.004	<0.0007
JP - CLASS 26	L546497-15	45.4	<0.2	<0.2	<0.2	<0.005	<0.0007

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

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

Submitted by: ECB
 Date : 20-SEP-21
 Supervisor : KAG

Approved by: MLN



GALSON

LABORATORY FOOTNOTE REPORT

Client Name : Phase Separation Science, Inc.
Site : JAMES K. POLK ES
Project No. : ACPS IAQ TESTING - 4920002

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

Date Sampled : 09-SEP-21 Account No.: 15354
Date Received: 14-SEP-21 Login No. : L546497
Date Analyzed: 17-SEP-21

L546497 (Report ID: 1265461):

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

L546497 (Report ID: 1265461):

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.

<u>Parameter</u>	<u>Accuracy</u>	<u>Mean Recovery</u>
4-Phenylcyclohexene (4PCH low LOQ)	+/-18%	88.2%

172313E40165206989
 Date: 09/14/21
 Shipper: UPS
 Initials: BGF

LS46497

21091314

New Client? Report To*: Phase Separation Science
 6630 Baltimore National Pike
 Client Account No.*: Baltimore, MD 21228

Invoice To*: Phase Separation Science



East Syracuse, NY 13057
 Tel: (315) 432-5227
 888-432-LABS (5227)
 www.sgsalson.com

92

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

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

Need Results By:	(surcharge)
<input checked="" type="checkbox"/> Standard	0%
<input type="checkbox"/> 4 Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

Site Name: James K. Polk ES Project: ACPS IAQ testing - 4920002 Sampled by: Karl Ford

Comments: * id "Hall 10-7"
 * v id "HALL 3J" BGF 9/14/21

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

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

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

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units* L, ml, min, in2, cm2, ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JP - Library	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - 41 Class	09/09/21	Sm Charcoal tubes / 226-01	48.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - 22 Class / Band	09/09/21	Sm Charcoal tubes / 226-01	45.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Room 1	09/09/21	Sm Charcoal tubes / 226-01	43.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Gym	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 14	09/09/21	Sm Charcoal tubes / 226-01	44.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 50	09/09/21	Sm Charcoal tubes / 226-01	49.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 38	09/09/21	Sm Charcoal tubes / 226-01	47.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Reception	09/09/21	Sm Charcoal tubes / 226-01	46.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
* JP - Hall 107 02 9/13/21	09/09/21	Sm Charcoal tubes / 226-01	43.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
v JP - Hall 35 JS	09/09/21	Sm Charcoal tubes / 226-01	47.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson 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	Print Name/Signature	Date	Time
Relinquished by:	Channing Jackson	09/10/21	13:30	Received by:		
Relinquished by:	Ted Kraus	9/13/21	1246	Received by:	Alan Fisher	9/13/21 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

21091314



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

Invoice To* : Phase Separation Science

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

Client Account No.*: _____
Phone No.* : 410-747-8770
Cell No. : _____
Email Results to : Amber Confer
Email address: 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.

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

Need Results By:	(surcharge)	Site Name : James K. Polk		Project : ACPS IAQ testing - 4920002		Sampled by : Karl Ford	
<input checked="" type="checkbox"/> Standard	0%	Comments :					
<input type="checkbox"/> 4 Business Days	35%						
<input type="checkbox"/> 3 Business Days	50%						
<input type="checkbox"/> 2 Business Days	75%						
<input type="checkbox"/> Next Day by 6pm	100%	List description of industry or Process/interferences present in sampling area : Public grade school		State samples were collected in (e.g., NY) VA		Please indicate which OEL this data will be used for : <input checked="" type="checkbox"/> OSHA PEL <input type="checkbox"/> ACGIH TLV <input type="checkbox"/> Cal OSHA <input type="checkbox"/> MSHA <input type="checkbox"/> Other (specify):	
<input type="checkbox"/> Next Day by Noon	150%						
<input type="checkbox"/> Same Day	200%						

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units* L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JP - Class 33	09/09/21	Sm Charcoal tubes / 226-01	45.8	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Multi Purpose	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Hall 53	09/09/21	Sm Charcoal tubes / 226-01	46.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 26	09/09/21	Sm Charcoal tubes / 226-01	45.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson 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	Print Name/Signature	Date	Time
Relinquished by:	Channing Jackson	09/10/21	13:30	Received by:		
Relinquished by:	Ted Kraus	9/13/21	12:46	Received by:	<i>[Signature]</i>	9/13/21 12:42

Samples received after 3pm will be considered as next day's business
* Required Page 9 of 7 - Report Reference: Generated by SGP 210925 Page 2 of 2



Chain of Custody Form for Subcontracted Analyses

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

W.O. No. : **21091314**
Project Location : Jakes K. Polk ES
Project Number : 4920002
Report To LOD : No

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

Lab Sample ID	Field Sample ID	Date Sampled	Time Sampled	Matrix	Analyses Required	Method	Type of Container	Preservative
21091314-001	JP-Library	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-002	JP-41 Class	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-003	JP-22 Class/Band	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-004	JP-Room 1	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-005	JP-Gym	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-006	JP-Class 14	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-007	JP-Class 50	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-008	JP-Class 38	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-009	JP-Reception	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-010	JP-Hall 107	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-011	JP-Hall 35	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-012	JP-Class 33	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-013	JP-Multi Purpose	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-014	JP-Hall 53	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON
21091314-015	JP-Class 26	09/09/21	00:00	Air	4-Phenylcyclohexene	VARIOUS	NONSC	NON

Data Deliverables Required: **COA**

Perform Q.C. on Sample : _____

Send Report Attn : reporting@phaseonline.com

Send Invoice Attn : invoicing@phaseonline.com

Airbill No.: _____ Carrier : MPS

Condition Upon Receipt : _____

Comments :

Samples Relinquished By : [Signature] Date : 9/13/21 Time : _____ Samples Received By : Brett Grenert-Fischer Brett Grenert-Fischer 9/14/21
 Samples Relinquished By : _____ Date : _____ Time : _____ Samples Received By : _____ 0944
 Samples Relinquished By : _____ Date : Page 7 of 7 Time : _____ Report Reference: 1 Generated: 21-SEP-21 08:25
 Samples Received By : _____

Case Narrative

Project Name: ACPS IAQ Testing

PSS Project No.: 21091314

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.

21091314



New Client? Report To*: Phase Separation Science
 6630 Baltimore National Pike
 Client Account No.*: Baltimore, MD 21228
 Phone No.*: 410-747-8770
 Cell No.:
 Email Results to: Amber Confer
 Email address: reporting@phaseonline.com

Invoice To*: Phase Separation Science
 Phone No.: 410-747-8770
 Email: invoicing@phaseonline.com
 P.O. No.: QDC 4920002-001
 Credit Card: Card on File Call for Credit Card Info.

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

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

Need Results By: (surcharge) Standard 0% Site Name: James K. Polk ES Project: ACPS IAQ testing - 4920002 Sampled by: Karl Ford

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

Comments:
 List description of industry or Process/interferences present in sampling area:
 Public grade school
 State samples were collected in (e.g., NY): VA
 Please indicate which OEL this data will be used for:
 OSHA PEL ACGIH TLV Cal OSHA
 MSHA Other (specify):

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml, min, in2, cm2, ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
JP - Library	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - 41 Class	09/09/21	Sm Charcoal tubes / 226-01	48.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - 22 Class / Band	09/09/21	Sm Charcoal tubes / 226-01	45.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Room 1	09/09/21	Sm Charcoal tubes / 226-01	43.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Gym	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 14	09/09/21	Sm Charcoal tubes / 226-01	44.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 50	09/09/21	Sm Charcoal tubes / 226-01	49.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 38	09/09/21	Sm Charcoal tubes / 226-01	47.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Reception	09/09/21	Sm Charcoal tubes / 226-01	46.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Hall 107	09/09/21	Sm Charcoal tubes / 226-01	43.6	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Hall 35 JS	09/09/21	Sm Charcoal tubes / 226-01	47.2	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson 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	Print Name/Signature	Date	Time
Relinquished by:	Channing Jackson	09/10/21	13:30	Received by:		
Relinquished by:	Ted Kraus	9/13/21	1246	Received by:	Amber Confer	9/13/21 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

21091314



New Client? Report To*: Phase Separation Science
 6630 Baltimore National Pike
 Client Account No.*: Baltimore, MD 21228
 Phone No.*: 410-747-8770
 Cell No. :
 Email Results to : Amber Confer
 Email address: reporting@phaseonline.com

Invoice To*: Phase Separation Science
 Phone No.: 410-747-8770
 Email : invoicing@phaseonline.com
 P.O. No. : ODC 4920002-001
 Credit Card : Card on File Call for Credit Card Info.

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

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

Need Results By:	(surcharge)	Site Name : James K. Polk	Project : ACPS IAQ testing - 4920002	Sampled by : Karl Ford
<input checked="" type="checkbox"/> Standard	0%	Comments :		
<input type="checkbox"/> 4 Business Days	35%			
<input type="checkbox"/> 3 Business Days	50%			
<input type="checkbox"/> 2 Business Days	75%			
<input type="checkbox"/> Next Day by 6pm	100%			

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

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

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

Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
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JP - Multi Purpose	09/09/21	Sm Charcoal tubes / 226-01	44.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Hall 53	09/09/21	Sm Charcoal tubes / 226-01	46.0	L	4-Phenylcyclohexene	mod. NIOSH 1501	
JP - Class 26	09/09/21	Sm Charcoal tubes / 226-01	45.4	L	4-Phenylcyclohexene	mod. NIOSH 1501	

^Galson 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:	Print Name/Signature	Date	Time
Relinquished by :	Channing Jackson	09/10/21	13:30	Received by :			
Relinquished by :	Ted Kraus	9/13/21	12:46	Received by :	<i>[Signature]</i>	9/13/21	12:42

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

Project Name: ACPS IAQ Testing
PSS Project No.: 21091314

Client Name Total Environmental Concepts - Lortc
Received By Amber Confer
Disposal Date 10/18/2021
Date Received 09/13/2021 12:42:00 PM
Delivered By Client
Tracking No Not Applicable
Logged In By Amber Confer

Shipping Container(s)

No. of Coolers 0

Custody Seal(s) Intact? N/A
Seal(s) Signed / Dated? N/A

Ice N/A
Temp (deg C)
Temp Blank Present No

Documentation

COC agrees with sample labels? Yes
Chain of Custody Yes

Sampler Name Karl Ford
MD DW Cert. No. N/A

Sample Container

Appropriate for Specified Analysis? Yes
Intact? Yes
Labeled and Labels Legible? Yes

Custody Seal(s) Intact? Not Applicable
Seal(s) Signed / Dated Not Applicable

Holding Time

All Samples Received Within Holding Time(s)? Yes

Total No. of Samples Received 15
Total No. of Containers Received 15

Preservation

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

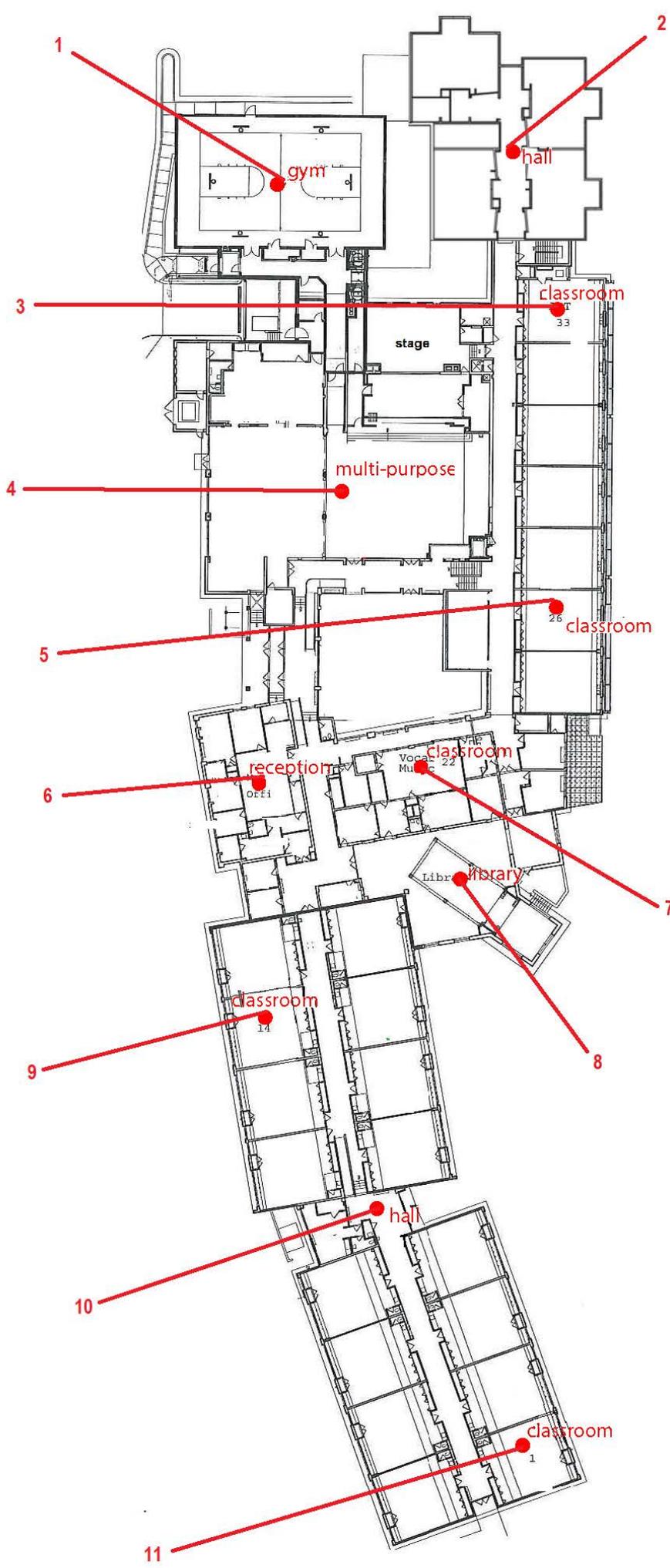
Comments: (Any "No" response must be detailed in the comments section below.)

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

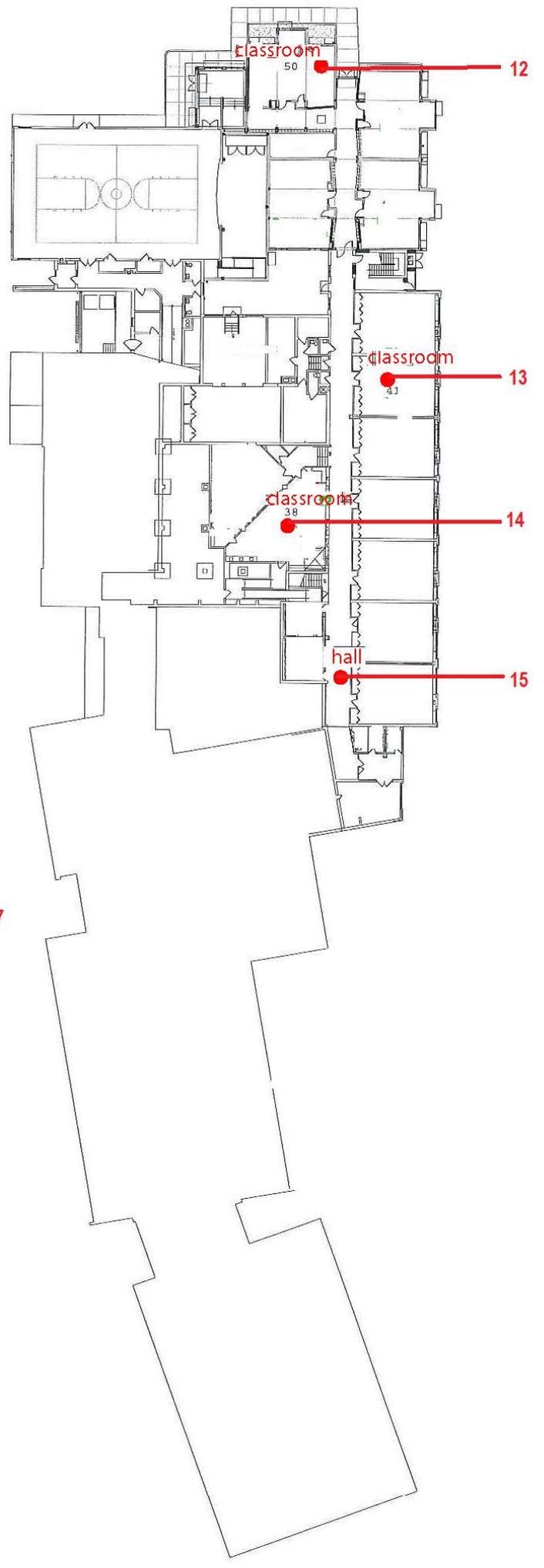
Samples Inspected/Checklist Completed By: Amber Confer Date: 09/13/2021

PM Review and Approval: Lynn Jackson Date: 09/13/2021

Appendix F: Sampling Locations



1
A102 MAIN LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"



1
A102 LOWER LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"

JAMES K. POLK ELEMENTARY SCHOOL
 5000 Polk Avenue
 Alexandria, VA 22304



LEGEND

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

Total Environmental Concepts, Inc.

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

Appendix G: Photographs



James K Polk, Library



James K Polk, Cafetorium



James K Polk, Band Room



James K Polk, Classroom



James K Polk, Gym



James K Polk, Hallway