

Soil and Land Use Technology, Inc. 1818 New York Ave. NE, Ste 231, Washington, DC 20002

Telephone: (301) 595-3783 www.salutinc.com

June 18, 2019

Prince George's County Public Schools (PGCPS) Environmental Safety Office 13306 Old Marlboro Pike Upper Marlboro, MD 20772

Attention: Alex Baylor <u>alex.baylor@pgcps.org</u>

Subject: Indoor Air Quality Survey James Ryder Randall Elementary School 5410 Kirby Road Clinton, MD 20735

Mr. Baylor:

On May 31, 2019, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at James Ryder Randall Elementary School, a property maintained by the Prince George's County Public Schools (PGCPS) located at 5410 Kirby Road, Clinton, MD 20735. The inspection was performed in accordance with PGCPS contract number IFB 022-19.

Methodology

The IAQ evaluation conducted by SaLUT included a visual assessment, IAQ instrumentation screening, and a collection of interior air samples for mold in representative locations throughout the building. Additionally, one building exterior environmental air sample was taken for comparison.

Air-borne fungal spore samples were collected on *Air-O-Cell* cassettes using a Buck BioAire calibrated pump. The air samples were taken between three and five feet from the ground. In tandem with collecting mold samples, real-time readings for carbon dioxide, carbon monoxide, temperature and relative humidity were collected using a Fluke 975 Air Meter in representative areas within the facility. A MiniRAE 3000photoionization detector (PID) was used to measure total volatile organic compounds (TVOC).



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Respirable particulate in air (size classes PM2.5µ and PM10µ) was measured using the Particles Plus 8306 Handheld Particle Counter which was calibrated prior to sampling. The fungal spore air samples were delivered to EMSL Analytical, Inc. of Beltsville, Maryland for analysis. Fungal spores and particulates in air samples were analyzed by Optical Microscopy (methods EMSL 05-TP-003 and ASTM D7391). The sample chain-of-custody and laboratory reports are attached.

Observations

The table below summarizes the main observations from the IAQ survey at James Ryder Randall Elementary School, visited on May 31, 2019.

Location	Summary of Observations 5-31-2019
Classroom 103	2'x2' ceiling tiles and 1'x1' tile floor;
	Visual signs of microbial growth on ceiling tiles, and no odor;
	No visible dust on floor/other furniture surfaces;
	Central HVAC system.
Classroom 107	2'x2' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Central HVAC system.
Classroom 113	2'x2' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Central HVAC system.
Gymnasium	2'x2' ceiling tiles and concrete floor;
	Dusty air vents and stained ceiling tiles;
	No visible dust on floor/other furniture surfaces;
	Central HVAC system.
Classroom M 3	2'x2' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Central HVAC system.
Physical Therapy	2'x2' ceiling tiles and 1'x1' tile floor;
Gymnasium	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	Dusty air vents and stained ceiling tiles;
	Central HVAC system.
Majority of Classrooms	No visual signs of microbial growth, and no odor;
throughout the School	No visible dust on floor/other furniture surfaces;
~	Central HVAC system.

Table 1-Observations



Measurements of Indoor Environmental Quality Parameters

Table 2 depicts a summary of average measurements of comfort parameters and respirable particulates.

<u>Temperature</u>

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) have published recommendations for year round acceptable temperatures in Standard 55-2010 *Thermal Environmental Conditions for Human Occupancy*. The winter comfort range is 20 to 24°C (68 to 75°F) and 23 to 26°C (73 to 79°F) is the summer comfort range. The temperature readings were within the ASHRAE recommended ranges in the representative spaces.

Relative Humidity (RH)

RH is a key factor for mold growth. Mold has the potential of growing on suitable surfaces with humidity levels above 60%. ASHRAE Standard 62.1-2010 *Ventilation for Acceptable Indoor Air Quality* recommends a maximum indoor RH of 65% to preclude the likelihood of condensation on cool surfaces encouraging mold growth. The RH readings were lower than the ASHRAE recommended ranges in the representative areas.

Carbon Dioxide (CO₂)

Under conditions of maximum occupancy, ASHRAE Standard 62.1-2010, Appendix C, infers that the acceptable CO_2 upper limit is the prevailing outdoor CO_2 concentration plus 700 parts per million (ppm). On the day of the space evaluation, the outdoor (building exterior) CO_2 concentration was approximately 503 ppm therefore indoor concentrations should not exceed approximately 1,203 ppm (700 + 503). The maximum average interior CO_2 concentration detected was 679 ppm in the Gymnasium, a range within the ASHRAE recommendations, per Table 2 below.

Carbon Monoxide (CO)

CO is a colorless and odorless gas that is produced by the incomplete combustion of carbon containing fuels. Oil, gasoline, diesel fuels, wood, coke, and coal are major sources of CO. All registered CO concentrations were below the EPA National Ambient Air Quality Standard (NAAQS) of 9 ppm, per Table 2 below.

Respirable Particulates

Direct reading particulate monitoring did not identify a condition of concern. Particulate concentrations for two mass ranges with EPA ambient air quality guidelines (PM2.5 and PM10) were below their respective NAAQS levels. On May 31, 2019, the highest average PM2.5 concentration during the monitoring period was 0.003 mg/m³ (3 μ g/m³) in the



Gymnasium. This is compared to the NAAQS primary standard for PM2.5 of $12 \ \mu g/m^3$ annual mean. The highest average PM10 concentration during the same period was 0.042 mg/m³ ($42 \ \mu g/m^3$) in the Gymnasium. This is compared to NAAQS standard for PM10 of 150 $\mu g/m^3$ 24 hour average.

Total Volatile Organic Chemicals (TVOC)

LEED's standard of 500 μ g/m³ for TVOC (ANSI/ASHRAE Standard 62.1-2010) concentrations per the instrument's level of detection for a healthy commercial building were used as the standard for TVOCs for this survey. Concentrations below this value can be considered as "background levels" and, at such low concentrations, they are extremely unlikely to cause any adverse health conditions to the occupants. Generally, values below 3000 μ g/m³ are unlikely to cause more than mild irritation or headaches, but to date no recognized industry standard has been established for TVOCs. Perfumes, colognes, and air fresheners as well as certain cleaning chemicals can all cause temporary increases in TVOC readings. TVOC readings cannot be used to establish OSHA limits on specific VOCs or be attributed to specific compounds.

Table 2: James Ryder Randall Elementary School Instrumental Screening LevelsMay 31, 2019

	Temp		CO	CO ₂	PM 2.5	PM 10	TVOC
Sample Location	⁰ F	RH%	ppm	ppm	mg/m ³	mg/m ³	ppm
	ASHRAE	ASHRAE	NAAQS	ASHRAE	NAAQS	NAAQS	
Standards	73 to 79°F*	<65%	9	1,203	0.012	0.150	1.0
Classroom 103	74.7	49.8	0	623	0.001	0.021	0.1
Classroom 107	74.3	55.6	0	551	0.001	0.019	0
Classroom 113	74.3	48.8	0	629	0.001	0.018	0
Gymnasium	77.9	64.4	0	679	0.003	0.042	0
Classroom M 3	74.3	58.9	0	660	0.002	0.029	0.1
Physical Therapy							0
Gymnasium	73.2	59.3	0	526	0.002	0.025	0
Exterior of the Building-							0
Next to the Entrance	77.9	56.6	0	503	0.002	0.032	0

PM – Particulate Matter size °F – Degrees Fahrenheit CO – Carbon Monoxide ppm – parts per million

µg/m³ – micrograms per cubic meter RH% - % Relative Humidity CO₂ – Carbon Dioxide * - Summer Comfort Range



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Mold-in-Air Samples

There are no definitive regulations or standardized guidelines for addressing airborne mold in an indoor setting. If building systems (ventilation, envelope) are functioning properly, the indoor population profile should mimic what is encountered outdoors and the concentrations should be below the outdoor (building exterior) environmental sample levels.

Tables 3 summarizes airborne mold spore sampling results and locations. On May 31, 2019, total mold counts in representative samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

Spore Types	Classroom 103	Classroom 107	Classroom 113	Gymnasium
Alternaria (Ulocladium)	-	-	-	-
Ascospores	1,100	200	1,100	1,100
Aspergillus/Penicillium	440	300	-	-
Basidiospores	4,890	1,800	2,300	16,100
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	40	200	300	300
Curvularia	-	-	-	-
Epicoccum	-	-	10*	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	-	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	-	-	-	-
Pollen	10*	30*	70*	-
Total Fungi	6,470	2,500	3,710	17,500

Table 3: James Ryder Randall Elementary School - Measurements of Mold-in-Air Samples Marr 21, 2010

*Spore Counts per cubic meter of air (Counts/m³).

++Includes other spores with similar morphology.



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Table 3: James Ryder Randall Elementary School - Measurements of Mold-in-Air Samples continued Marcola 2010

May 31, 2019								
Spore Types	Classroom M 3	Physical Therapy Gymnasium	Outside Exterior	Field Blank				
Alternaria (Ulocladium)	-	-	40	-				
Ascospores	90	660	7,460	-				
Aspergillus/Penicillium	-	90	-	-				
Basidiospores	520	3,200	12,100	-				
Bipolaris++	-	-	-	-				
Chaetomium	-	-	-	-				
Cladosporium	-	100	1,200	-				
Curvularia	-	-	-	-				
Epicoccum	-	-	-	-				
Fusarium	-	-	-	-				
Ganoderma	-	-	-	-				
Myxomycetes++	-	-	10*	-				
Pithomyces++	-	-	-	-				
Rust	-	-	-	-				
Scopulariopsis/Microascus	-	-	-	-				
Stachybotrys/Memnoniella	-	-	-	-				
Unidentifiable Spores	-	-	-	-				
Zygomycetes	-	-	-	-				
Hyphal Fragment	-	-	-	-				
Insect Fragment	-	-	-	-				
Pollen	-	-	10*	-				
Total Fungi	610	4,050	20,810	No Trace				

*Spore Counts per cubic meter of air (Counts/m³).

++Includes other spores with similar morphology.

Findings and Conclusions

The comfort parameters (i.e., temperature, RH, CO₂, and CO levels) and respirable particulates in the representative areas conform to ASHRAE and/or NAAQS guidelines. On May 31, 2019, total mold counts in representative area samples (spore count/m³ of air) in all the areas inspected were lower than the outdoor concentrations, indicating no amplified mold growth.



<u>Recommendations</u> Based on the observations, mold spore results, and the results of the indoor air quality parameters tested at James Ryder Randall Elementary School, SaLUT recommends the following measures to address the indoor air quality concerns documented:

1. Thoroughly clean air vents and replace suspect stained ceiling tiles in Classroom 103, Gymnasium, and Physical Therapy Gymnasium.

Thank you for the opportunity to provide industrial hygiene services for the PGCPS. If you have any questions, please contact me at 301.595.3783.

Sincerely,

Firstalake .

Chaminda Jayatilake, PE, CIH, CSP, CHMM Certified Industrial Hygienist Soil and Land Use Technology Inc. (SaLUT)

Attachment

Attachment - Mold Spore Sample Analytical Results and Chain-of-Custody Forms

Attachment

Mold Spore Sample Analytical Results and Chain-of-Custody Forms



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com

EMSL Order:	061910931
Customer ID:	SALU50
Customer PO:	
Project ID:	

Attn: Indika Jayatilake SaLUT 1818 New York Avenue, NE Suite 218A Washington, DC 20002 Project: PGCPS IAQ/19-035 James Ryder Randall ES

Phone:	(301) 595-3783
Fax:	(301) 595-3787
Collected:	05/31/2019
Received:	06/03/2019
Analvzed:	06/06/2019

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	061910931-0001 28458333 75 Classroom M 3				061910931-0002 28458323 75 Classroom 0107			061910931-0003 28458330 75 Physical Therapy Gymnasium		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-	
Ascospores	2	90	14.8	4	200	8	15	660	16.3	
Aspergillus/Penicillium	-	-	-	8	300	12	2	90	2.2	
Basidiospores	12	520	85.2	41	1800	72	74	3200	79	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	4	200	8	3	100	2.5	
Curvularia	-	-	-	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Unidentifiable Spores	-	-	-	-	-	-	-	-	-	
Zygomycetes	-	-	-	-	-	-	-	-	-	
Total Fungi	14	610	100	57	2500	100	94	4050	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	2*	30*	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	-	1	-	-	1	-	-	2	-	

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

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless othewise noted.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA-LAP, LLC--EMLAP Accredited #102344

Initial report from: 06/09/2019 10:39:38

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



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1818 New York Avenue, NE

Attn: Indika Jayatilake SaLUT

EMSL Order:	061910931
Customer ID:	SALU50
Customer PO:	
Project ID:	

 Phone:
 (301) 595-3783

 Fax:
 (301) 595-3787

 Collected:
 05/31/2019

 Received:
 06/03/2019

 Analyzed:
 06/06/2019

		100, 11 L				001		1/2010	
Suite 21	18A			Received: 06/03/2019					
Washin	gton, DC 200	002				Ana	alyzed: 06/0	6/2019	
Project: PGCPS	-		r Randall ES						
	10-000								
Test Rep	ort: Air-O-Cell(M) Analysis of F	ungal Spores &	Particulates by	Optical Micros	copy (Methods	MICRO-SOP-201	, ASTM D7391)	
Lab Sample Number:	1	061910931-0004	4		061910931-000	5		061910931-000	6
Client Sample ID:		28458696			28458610			28458352	
Volume (L):		75 Classroom 402			75 Classroom142			75 Cummasium	
Sample Location		Classroom 103	.		Classroom113			Gymnasium	
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	26	1100	17	25	1100	29.6	25	1100	6.3
Aspergillus/Penicillium	10	440	6.8	-	-	-	-	-	-
Basidiospores	112	4890	75.6	53	2300	62	370	16100	92
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	0.6	8	300	8.1	6	300	1.7
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	1*	10*	0.3	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	149	6470	100	87	3710	100	401	17500	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1*	10*	-	5*	70*	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	3	-	-	2	-
Fibrous Particulate (1-4)	-	2	-	-	1	-	-	2	-
Background (1-5)	-	2	-	-	3	-	-	1	-

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

Jeffrey Lau, Microbiology Laboratory Manager or other approved signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless othewise noted.

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 (301) 595-3783

 Fax:
 (301) 595-3787

 Collected:
 05/31/2019

 Received:
 06/03/2019

 Analyzed:
 06/06/2019

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	061910931-0007 28458363 75 Outside Exterior EV Sample			ent Sample ID: 28458363 28458342 Volume (L): 75				28458342				
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	-	-	-			
Alternaria (Ulocladium)	1	40	0.2	-	-	-	-	- '				
Ascospores	171	7460	35.8	-	-	-	-					
Aspergillus/Penicillium	-	-	-	-	-	-	-					
Basidiospores	278	12100	58.1	-	-	-	-					
Bipolaris++	-	-	-	-	-	-	-					
Chaetomium	-	-	-	-	-	-	-					
Cladosporium	28	1200	5.8	-	-	-	-					
Curvularia	-	-	-	-	-	-	-					
Epicoccum	-	-	-	-	-	-	-					
Fusarium	-	-	-	-	-	-	-					
Ganoderma	-	-	-	-	-	-	-					
Myxomycetes++	1*	10*	0	-	-	-	-					
Pithomyces++	-	-	-	-	-	-	-					
Rust	-	-	-	-	-	-	-					
Scopulariopsis/Microascus	-	-	-	-	-	-	-					
Stachybotrys/Memnoniella	-	-	-	-	-	-	-					
Unidentifiable Spores	-	-	-	-	-	-	-					
Zygomycetes	-	-	-	-	-	-	-					
Total Fungi	479	20810	100	-	No Trace	-	-					
Hyphal Fragment	-	-	-	-	-	-	-					
Insect Fragment	-	-	-	-	-	-	-					
Pollen	1*	10*	-	-	-	-	-	-	_			
Analyt. Sensitivity 600x	-	44	-	-	0	-	-	-	-			
Analyt. Sensitivity 300x	-	13*	-	-	0*	-	-					
Skin Fragments (1-4)	-	2	-	-	-	-						
Fibrous Particulate (1-4)	-	2	-	-	-	-	-					
Background (1-5)	-	2	-	-	-	-	-					

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

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Microbiology Chain of Custody EMSL Order-Number (Lab Use Only):

061910931

PHONE:

LABORATORY-PRODUCTS	FAX:								
Company Name: {	EMSL-Bill to: Same Different If Bill to is Different note instructions in Comments**				*				
Street: 1818 New	York Ave N	E Suite 231		Third Party Billing requires written authorization from third party				third party	
City: Washington		State/Province: DC		Zip/Postal Co	de: 20002		Country: USA	N I I I I I I I I I I I I I I I I I I I	
Report To (Name):	Indika Jayat	ilake		Telephone #:	301-595-3	783			
Email Address: ^{ija}	yatilake@sal	utinc.com		Fax #:			Purchase Or	ler:	
Project Number/Loc	ation: PGCPS l	AQ/19-035 James Ryder	Randali ES	Please Provid	le Results	: 🗌 Fax	Email		
		d, Clinton MD 201735		 Co	onnecticut S	Samples: 🗌	Commercial 🔲 I	Residential	
		ith EMSL's Terms and Co					pject to methodolog	gy requirements	
		Sulfate Preserved Bot			^ /				
	water Suppry	Samples: Note: Al		ptions * - Pleas	-		required by sta		
3 Hour	6 Hour	24 Hour		72 Hour	1	6 Hour	🔳 1 Week	🗌 2 Week	
		N	licrobiology						
M001 Air-O-Cell	M174 N	/oldSnap		nonas aeruginosa	(MFT*)		age Screen - Wate		
M030 Micro 5		Allergenco-D		ophic Plate Count			age Screen - Wate		
M041 Fungal Direct E	xamination		P/A***)	liform & E. coli (Co	oniert	M117 Sew	rage Screen - Swa rage Screen - Swa	b (P/A***) b (MFT*)	
M169 Pollen ID & Enu				liform & E. coli (M		M133 Met	nicillin-resistant Sta	aph. aureus	
M280 Dust Characteri			M114 Total Co (Colilert MPN**	liform & E, coli En	umeration	(MRSA)	id-growing non-TB	Mycobactoria	
M281 Dust Characteri M005 Viable Fungi- A		us ID & Count)	M019 Fecal Co				& Enumeration	wycobactena	
M006 Viable Fungi- A				reptococcus (MFT	*)		otoxin Analysis		
		rys Species ID & Count)	M029 Enteroco M129 Enteroco	occi (MFT*) occi (Enterolert P//	4***)	Dust Mite)	up Allergen (Cat, D	og, Cockroach,	
M007 Culturable fungi M008 Culturable fungi		oles (Genus ID & Count)		e qPCR-ERMI 36			e Analytical Price (Guide	
Penicillium, Aspergillu	is, Cladosporiun	n, Stachybotrys Species	Panel	Conner Materia	/CT+)		Analysis Please	use EMSL	
ID & Count) M009 Bacteria Culture	Crom Clair 9	Caurt	WU25 Sewage	M025 Sewage Screen –Water (MFT*) Legionella COC					
M009 Bacteria Collun M010 Bacteria Count			*MFT= Membrane Filtration Technique						
M011 Bacteria Count	& ID - 5 Most Pr	rominent	***MPN= Most Probable Number ****P/A= Presence/Absence						
M012 Pseudomonas Name of Sampler:									
Name of Sampler,	Jude Fonseka		<u>_</u>	Signature of S Potable/	Sampler:		<u></u>	Temperature	
Sample #	Sample L	ocation/Description	Sample	NonPotable Test		Volume/	Date/Time	('C)	
campio //	oumpie E	ooutonibesenption	Туре	(only for waters)	Code	Area	Collected	(Lab Use Only)	
				, waters)		'		Only)	
28458333	Cla	assroom M 3	Air		M001	75L	5/31/2019		
28458323	Cia	ssroom 0107	Air		M001	75L	5/31/2019		
28458330		herapy Gymnasium	Air		M001	75L	5/31/2019		
28458696		assroom 103	Air		M001	75L	5/31/2019		
28458610	Cla	assroom113	Air		M001	75L	5/31/2019		
28458352	Gyn	nnasium	Air		M001	75L	5/31/2019		
Client Sample # (s): -	T	otal # of Samp			Received	Chilled? Yes /	No	
Relinquished (Clie			Dat			Time:			
Received (Lab):	Haun	n Camara	Dat	e: 0/3/	2019	Time:	n'os		
Comments/Specia	I Instructions		Walk-In						
								ł	
					$- \overline{\frown}$	/ /	<u> </u>		
			Page <u>1</u> of		/ /	/ /	//		
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		Pa	ge 1 Of	2		m	m/	ノ ' (



Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

PHONE: FAX:

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
28458363	Outside Exterior EV Sample	Air	□ P □NP	M001	75L	5/31/2019	
	Field Blank	N/A		N/A	N/A	5/31/2019	
			P NP				
	~						·····
	· · · · · · · · · · · · · · · · · · ·						
	-						
Comments/	Special Instructions:						

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

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