

1818 New York Ave. NE, Ste 231, Washington, DC 20002

Soil and Land Use Technology, Inc. Telephone: (301) 595-3783 www.salutinc.com

January 11, 2021

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

- Attention: Alex Baylor alex.baylor@pgcps.org
- Subject: Indoor Air Quality Survey John Eager Howard Community Center 4400 Shell Street Capitol Heights, MD 20743

Mr. Baylor:

On December 4, 2020, a Soil and Land Use Technology, Inc. (SaLUT) Industrial Hygienist conducted an indoor air quality (IAQ) evaluation at John Eager Howard Community Center, a property maintained by Prince George's County Public Schools (PGCPS) located at 4400 Shell Street, Capitol Heights, MD 20743. 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.

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 John Eager Howard Community Center, visited on December 4, 2020.

Location	Summary of Observations 12-4-2020
Cafeteria	2'x4' ceiling tiles and 1'x1' tile floor;
	No visual signs of microbial growth;
	Mild odor;
	Stained ceiling tiles;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
Hallway Between	2'x4' ceiling tiles and 1'x1' tile floor;
Classroom 1 and 11	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
Hallway Between	2'x4' ceiling tiles and 1'x1' tile floor;
Classroom 05 and 06	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
In front of Classroom	2'x4' ceiling tiles and 1'x1' tile floor;
06	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.
Conference and	2'x4' ceiling tiles and 1'x1' tile floor;
Planning Room	No visual signs of microbial growth, and no odor;
	No visible dust on floor/other furniture surfaces;
	No visible dust around ventilator;
	Central AC.

#### **Table 1-Observations**

#### Measurements of Indoor Environmental Quality Parameters

Table 2 depicts a summary of average measurements of comfort.

#### <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 with the exception of the Hallway Between Classroom 1 and 11.

#### **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 within the ASHRAE recommended ranges in the representative areas.

#### Carbon Dioxide (CO<sub>2</sub>)

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 469 ppm therefore indoor concentrations should not exceed approximately 1,169 ppm (700 + 469). The maximum average interior  $CO_2$  concentration detected was 645 ppm in front of Classroom 06, 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.

# Table 2: John Eager Howard Community Center, Instrumental Screening LevelsDecember 4, 2020 (7:30 AM-9:30 AM)

	Temp		CO	CO <sub>2</sub>
Sample Location	<sup>0</sup> F	RH%	ppm	ppm
	ASHRAE	ASHRAE	NAAQS	ASHRAE
Standards	68 to 75°F*	<65%	9	1,169
Cafeteria	68.0	29.9	0	538
Hallway Between Classroom 1 and 11	66.9	27.7	0	490
Hallway Between Classroom 05 and 06	72.4	25.2	0	505
In front of Classroom 06	69.0	24.3	0	645
Conference and Planning Room	71.3	23.5	0	493
Outside Exterior EV Sample	60.8	39.0	0	469

PM – Particulate Matter size °F – Degrees Fahrenheit CO – Carbon Monoxide ppm – parts per million  $\mu g/m^3$  – micrograms per cubic meter RH% - % Relative Humidity CO<sub>2</sub> – Carbon Dioxide \* - Winter Comfort Range



#### 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 December 4, 2020, total mold counts in representative samples (spore count/m<sup>3</sup> of air) in all the areas inspected were lower than the outdoor concentrations. Laboratory analysis follows this report (see attachment).

Spore Types	Cafeteria	Hallway between Classrooms 1 and 11	Hallway between Classroom 05 and 06	In front of Classroom 06
Alternaria (Ulocladium)	-	-	-	-
Ascospores	40	-	-	-
Aspergillus/Penicillium	40	200	40	100
Basidiospores	400	300	200	590
Bipolaris++	-	-	-	-
Chaetomium	-	-	-	-
Cladosporium	80	-	-	-
Curvularia	-	-	-	-
Epicoccum	-	-	-	-
Fusarium	-	-	-	-
Ganoderma	-	-	-	-
Myxomycetes++	-	10	-	-
Pithomyces++	-	-	-	-
Rust	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-
Unidentifiable Spores	-	-	-	-
Zygomycetes	-	-	-	-
Nigrospora	-	-	-	-
Hyphal Fragment	-	-	-	-
Insect Fragment	40	-	-	-
Pollen	-	-	-	-
Total Fungi	560	510	240	690

#### Table 3: John Eager Howard Community Center – Measurements of Mold-in-Air Samples December 4, 2020 (7:30 AM-9:30 AM)

\* Spore Counts per cubic meter of air (Counts/m<sup>3</sup>).

++Includes other spores with similar morphology.



#### Table 3: John Eager Howard Community Center – Measurements of Mold-in-Air Samples continued December 4 2020 (7:30 AM-9:30 AM)

Spore Types	Conference and Planning Room	Outside Exterior EV Sample	Field Blank
Alternaria (Ulocladium)	40	40	-
Ascospores	-	80	-
Aspergillus/Penicillium	-	200	-
Basidiospores	40	2,300	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	10	1,900	-
Curvularia	-	40	-
Epicoccum	-	100	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	300	-
Pithomyces++	-	-	-
Rust	-	930	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Nigrospora	-	-	-
Hyphal Fragment	-	40	-
Insect Fragment	-	-	-
Pollen	-	-	-
Total Fungi	90	7,830	No Trace

\*Spore Counts per cubic meter of air (Counts/m<sup>3</sup>).

++Includes other spores with similar morphology.



#### **Findings and Conclusions**

The comfort parameters (i.e., temperature, RH, CO<sub>2</sub>, and CO levels) in the representative areas conform to ASHRAE and/or NAAQS guidelines. On December 4, 2020, total mold counts in representative area samples (spore count/m<sup>3</sup> of air) in all the areas inspected were lower than the outdoor concentrations, indicating no amplified mold growth.

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

Sincerely

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.

5221 Militia Hill Road Plymouth Meeting, PA 19462 Tel/Fax: (610) 828-3102 / (610) 828-3122 http://www.EMSL.com / plymouthmeetinglab@emsl.com

EMSL Order:	182003920
Customer ID:	SALU50
Customer PO:	
Project ID:	

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002 Project: 19-035 John Edger Howard Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 12/04/2020 Received Date: 12/04/2020 01:06 PM Analyzed Date: 12/09/2020

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)											
Lab Sample Number:	1	82003920-0001		1	82003920-0002		1	82003920-0003			
Client Sample ID:		S1 75			S2 75			S3 75			
Volume (L): Sample Location:			-								
		Cafeteria			tween CR 11 an		Infront of CR 6A				
Spore Types	Raw Count	Count/M <sup>3</sup>	% of Total	Raw Count	Count/M <sup>3</sup>	% of Total	Raw Count	Count/M <sup>3</sup>	% of Total		
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-		
Ascospores	1	40	7.1	-	-	-	-	-	-		
Aspergillus/Penicillium	1	40	7.1	4	200	39.2	3	100	14.5		
Basidiospores	9	400	71.4	6	300	58.8	14	590	85.5		
Bipolaris++	-	-	-	-	-	-	-	-	-		
Chaetomium	-	-	-	-	-	-	-	-	-		
Cladosporium	2	80	14.3	-	-	-	-	-	-		
Curvularia	-	-	-	-	-	-	-	-	-		
Epicoccum	-	-	-	-	-	-	-	-	-		
Fusarium	-	-	-	-	-	-	-	-	-		
Ganoderma	-	-	-	-	-	-	-	-	-		
Myxomycetes++	-	-	-	1*	10*	2	-	-	-		
Pithomyces++	-	-	-	-	-	-	-	-	-		
Rust	-	-	-	-	-	-	-	-	-		
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-		
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-		
Unidentifiable Spores	-	-	-	-	-	-	-	-	-		
Zygomycetes	-	-	-	-	-	-	-	-	-		
Arthrinium	-	-	-	-	-	-	-	-	-		
Oidium	-	-	-	-	-	-	-	-	-		
Total Fungi	13	560	100	11	510	100	17	690	100		
Hyphal Fragment	-	-	-	-	-	-	-	-	-		
Insect Fragment	1	40	-	-	-	-	-	-	-		
Pollen	-	-	-	-	-	-	-	-	-		
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-		
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-		
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-		
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-		
Background (1-5)	-	1	-	-	1	-	-	1	-		

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

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Kevin Ream, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples are received, accept in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulates can overloading of background 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.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA AIHA-LAP, LLC-EMLAP Accredited #178659

Initial report from: 12/09/2020 12:10 PM

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



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5221 Militia Hill Road Plymouth Meeting, PA 19462 Tel/Fax: (610) 828-3102 / (610) 828-3122 http://www.EMSL.com / plymouthmeetinglab@emsl.com EMSL Order: 182003920 Customer ID: SALU50 Customer PO: Project ID:

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002 Project: 19-035 John Edger Howard Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 12/04/2020 Received Date: 12/04/2020 01:06 PM Analyzed Date: 12/09/2020

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)											
Lab Sample Number: Client Sample ID: Volume (L):	S4 75			18	82003920-0005 S5 75		1	82003920-0006 S6 75			
Sample Location:	HW Be	tween CR 05 ar	nd 06	Room Cor	nference and P	lanning		Outside			
Spore Types	Raw Count	Count/M <sup>3</sup>	% of Total	Raw Count	Count/M <sup>3</sup>	% of Total	Raw Count	Count/M <sup>3</sup>	% of Total		
Alternaria (Ulocladium)	-	-	-	1	40	44.4	1	40	0.5		
Ascospores	-	-	-	-	-	-	2	80	1		
Aspergillus/Penicillium	1	40	16.7	-	-	-	5	200	2.6		
Basidiospores	5	200	83.3	1	40	44.4	54	2300	29.4		
Bipolaris++	-	-	-	-	-	-	-	-	-		
Chaetomium	-	-	-	-	-	-	-	-	-		
Cladosporium	-	-	-	1*	10*	11.1	44	1900	24.3		
Curvularia	-	-	-	-	-	-	1	40	0.5		
Epicoccum	-	-	-	-	-	-	3	100	1.3		
Fusarium	-	-	-	-	-	-	-	-	-		
Ganoderma	-	-	-	-	-	-	-	-	-		
Myxomycetes++	-	-	-	-	-	-	6	300	3.8		
Pithomyces++	-	-	-	-	-	-	-	-	-		
Rust	-	-	-	-	-	-	22	930	11.9		
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-		
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-		
Unidentifiable Spores	-	-	-	-	-	-	-	-	-		
Zygomycetes	-	-	-	-	-	-	-	-	-		
Arthrinium	-	-	-	-	-	-	1	40	0.5		
Oidium	-	-	-	-	-	-	46	1900	24.3		
Total Fungi	6	240	100	3	90	100	185	7830	100		
Hyphal Fragment	-	-	-	-	-	-	1	40	-		
Insect Fragment	-	-	-	-	-	-	-	-	-		
Pollen	-	-	-	-	-	-	-	-	-		
Analyt. Sensitivity 600x	-	42	-	-	42	-	-	42	-		
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-		
Skin Fragments (1-4)	-	1	-	-	2	-	-	1	-		
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-		
Background (1-5)	-	1	-	-	1	-	-	1	-		

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

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Kevin Ream, Laboratory Manager or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA AIHA-LAP, LLC-EMLAP Accredited #178659

Initial report from: 12/09/2020 12:10 PM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com MIC\_M001\_0002\_0002 Printed: 12/09/2020 12:10 PM



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EMSL Order:	182003920
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Project ID:	

Attention: Indika Jayatilake

SaLUT 1818 New York Avenue, NE Suite 231 Washington, DC 20002 Project: 19-035 John Edger Howard Phone: (301) 595-3783 Fax: (301) 595-3787 Collected Date: 12/04/2020 Received Date: 12/04/2020 01:06 PM Analyzed Date: 12/09/2020

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	1	82003920-0007 S7 Field Blank							
Spore Types	Raw Count	Count/M <sup>3</sup>	% of Total	-	-		-	-	-
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-			-			
Aspergillus/Penicillium	-	-	-			-			
Basidiospores	-	-	-			-			
Bipolaris++	-	-	-			-			
Chaetomium	-	-	-			-			
Cladosporium	-	-	-			-			
Curvularia	-	-	-			-			
Epicoccum	-	-	-			-			
Fusarium	-	-	-			-			
Ganoderma	-	-	-			-			
Myxomycetes++	-	-	-			-			
Pithomyces++	-	-	-			-			
Rust	-	-	-			-			
Scopulariopsis/Microascus	-	-	-			-			
Stachybotrys/Memnoniella	-	-	-			-			
Unidentifiable Spores	-	-	-			-			
Zygomycetes	-	-	-			-			
Arthrinium	-	-	-			-			
Oidium	-	-	-			-			
Total Fungi	-	No Trace	-						
Hyphal Fragment	-	-	-			-			
Insect Fragment	-	-	-			-			
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	0	-	-	-	-	-	-	-
Analyt. Sensitivity 300x	-	0*	-			-			
Skin Fragments (1-4)	-	-	-			-			
Fibrous Particulate (1-4)	-	-	-			-			
Background (1-5)	-	-	-			_			

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

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Kevin Ream, Laboratory Manager or other Approved Signatory

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

OrderID: 182003920

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EMSL EMBL ANALYTICAL, INC. Microbiology Chain of Custody EMSL Order Number (Lab Use Only):

182003920

EMSL ANALYTICAL, INC. 200 ROUTE 130 NORTH CINNAMINSON, NJ 08077 PHONE: (800) 220-3675 FAX:(856) 786-0262

						<u> </u>				
Company Name:	EMSL-Bill to: Same Different If Bill to is Different note instructions in Comments									
	York Ave NE Suite 23	31		Third Party Billing requires written authorization from third party.						
City: Washington	State/Pr	rovince: DC	>	Zip/Postal Code: Country:						
Report To (Name)	Telephone #:									
Email Address:	ijayatilalie	yahou.	r om	Fax #:		·	Purchase Or	der:		
Project Name/Num	nber: 14-035-J	John Edu	er Howard	Please Provide R	esults:	☐ Fax [	] Email			
U.S. State Sample	A A			0742 Conne				Residential		
	ed: 🔲 Biocide Use									
Public	y automatically be	reported	to DOH if	required by st	ate.					
	·			Options - Please C						
3 Hour	6 Hour	24 Hour	48 Hour	72 Hour	9	6 Hour	🗌 1 Week	🗌 2 Week		
Mood Air O Call				<b>y Test Codes</b> nonas aeruginosa (P/A	***)	M115 Sour	age Screen - Wa	tor (D/&***)		
M001 Air-O-Cell M030 Micro 5	M174 MoldSnap M032 Allergenco-	-D	M024 Pseudor	nonas aeruginosa (MF		M116 Sew	age Screen - Wa	ter (MPN**)		
M041 Fungal Direct E	T			ophic Plate Count liform & <i>E. coli</i> (Coliler	t P/Δ***)		age Screen - Swa age Screen - Swa			
M169 Pollen ID & Enu			M018 Total Co	liform & E. coli (MFT*)	-	M133 Meth	icillin-resistant S	taph. aureus		
M280 Dust Character			M114 Total Co (Colilert MPN*)	liform & <i>E. coli</i> Enume	ration	(MRSA) M031 Rani	d-growing non-Ti	B Mycohacteria		
M281 Dust Character M005 Viable Fungi- A	ization Level-2 Nr Samples (Genus ID & C	ount)	M019 Fecal Co	oliform (MFT*)		Detection 8	Enumeration			
M006 Viable Fungi- A	ir Samples (Includes Penic	cillium,	M020 Fecal St M029 Enteroco	reptococcus (MFT*)			otoxin Analysis p Allergen (Cat, I	Dog. Cockroach.		
Count)	orium, Stachybotrys Specie	es ID &	M129 Enteroco	occi (Enterolert P/A***)		Dust Mite)				
	i - Surface Samples (Genu	us ID &		e qPCR-ERMI 36 Par Screen –Water (MFT*			Analytical Price			
Count) M008 Culturable fung	i - Surface Samples (Includ	des	<b>_</b>	Screen –Water (MFT*) Legionella Analysis Please use EMŜL Legionella COC						
	is, Cladosporium, Stachyb									
M009 Bacteria Cultur	e Gram Stain & Count			Membrane Filtration Technique = Most Probable Number						
M010 Bacteria Count & ID - 3 Most Prominent										
M011 Bacteria Count	& ID - 5 Most Prominent		***P/A= Preser	ice/Absence		Λ				
M011 Bacteria Count	& ID - 5 Most Prominent		<u> </u>	nce/Absence		-	5			
M011 Bacteria Count Name of Sampler:	Place	Dia	<u> </u>	Signature of Sam	pier:	<u>f</u>	<u> </u>			
Name of Sampler:	Shenar		Sample	Signature of Sam Potable/	Test	Volume/	Date/Time	Temperature		
	Place		 >	Signature of Sam		Volume/ Area	Collected	Tempetature (C) (Lab Use Only)		
Name of Sampler:	Shenar		Sample	Signature of Sam Potable/ NonPotable	Test			<b>TG</b>		
Name of Sampler: Sample #	Shener Sample Location/Des		Sample Type	Signature of Sam Potable/ NonPotable (Only for Waters)	Test Code	Area	Collected 9/1/13	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1	Sample Location/Der Kitchen Sink/Tap	scription	Sample Type Water	Signature of Sam Potable/ NonPotable (Only for Waters)	Test Code M017	Area	Collected 9/1/13 4:00 PM	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1 \$ (	Shener Sample Location/Des Kitchen Sink/Tap Cafetaria	scription	Sample Type Water	Signature of Sam Potable/ NonPotable (Only for Waters)	Test Code M017 Mcb	Area 100 mL <b>25 m</b>	Collected 9/1/13 4:00 PM 12 0 4 20	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2.	Shener Sample Location/Des Kitchen Sink/Tap (afefaria Hw botween C Infront of CR	Scription R N and L G A	Sample Type Water A:r 4n	Signature of Sam Potable/ NonPotable (Only for Waters)	Test Code M017 M(cb) Jy	Area 100 mL 75 A 77	Collected 9/1/13 4:00 PM 12 0 4 20	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2. S 3	Shener Sample Location/Des Kitchen Sink/Tap (afefaria Hw botween C Infront of CR	R Mand J BA OS and Ub	Sample Type Water A:r 4n	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP	Test Code M017 Mcb) Jy	Area 100 mL 25 A 7 7 9 7	Collected 9/1/13 4:00 PM 12 04/20 31 +	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1 S 1 S 2. S 3 S 4	Shener Sample Location/Des Kitchen Sink/Tap (afetaria HW botween C Infront of CR HW botween LR HW botween LR loom (enterence com	Scription R Navel LA OS and Ub	Sample Type Water Afir M 19	Signature of Sam           Potable/           NonPotable           (Only for Waters)           P           P           P           P           P           P           P           P           P           P           P           P           P           P           P           NP           P           NP           P           NP	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 75 A 7 7 97 97	Collected 9/1/13 4:00 PM 12   04   20 31 4 37 4 Chilled? Y	("S) (Leb Use Only)		
Name of Sampler: Sample # Example A1 \$ 1 \$ 2 \$ 3 \$ 4 \$ 5 \$ 5	Shener Sample Location/Des Kitchen Sink/Tap (afetaria HW botween C Infront of CR HW botween LR HW botween LR Ioom (enterence com	Scription R Navel LA OS and Ub	Sample Type Water A. r M 19 7	Signature of Sam           Potable/           NonPotable           (Only for Waters)           P           P           P           P           P           P           P           P           P           P           P           P           P           P           P           P           P           NP           P           NP           NP           NP	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 75	Collected 9/1/13 4:00 PM 12   04   20 31 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2. S 3 S 4 S S Client Sample # (s Relinquished (Clie Received (Lab):	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	Scription R Navel LA OS and Ub	Sample Type Water A. r M 19 7	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: © 7-	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 25 M 77 97 97 97 97 97 97 97 97 97	Collected 9/1/13 4:00 PM 12   04   20 31 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 \$ ( \$ 2 \$ 3 \$ 4 \$ 5 Client Sample # (s Relinquished (Clie	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	Scription R Navel LA OS and Ub	Sample Type Water A. r M 19 7	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: O 7- Date:	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 15 ml 7 7 97 97 97 97 97 97 97 97 97 9	Collected 9/1/13 4:00 PM 12 04/20 31 4 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2. S 3 S 4 S S Client Sample # (s Relinquished (Clie Received (Lab):	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	Scription R Navel LA OS and Ub	Sample Type Water A. r M 19 7	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: O 7- Date:	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 15 ml 7 7 97 97 97 97 97 97 97 97 97 9	Collected 9/1/13 4:00 PM 12   04   20 31 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2. S 3 S 4 S S Client Sample # (s Relinquished (Clie Received (Lab):	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	Scription R Navel LA OS and Ub	Sample Type Water A. r M 19 7	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: O 7- Date:	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 15 ml 7 7 97 97 97 97 97 97 97 97 97 9	Collected 9/1/13 4:00 PM 12 04/20 31 4 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 S ( S 2. S 3 S 4 S S Client Sample # (s Relinquished (Clie Received (Lab):	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	Scription R Navel LA OS and Ub	Sample Type Water A:r 49 79 Total # of S	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: O 7- Date: Date:	Test Code M017 Mcb) Jy Yy Yy Yy Sample	Area 100 mL 15 ml 7 7 97 97 97 97 97 97 97 97 97 9	Collected 9/1/13 4:00 PM 12   04   20 31 4 37 4 Chilled? Y	(Lab Use Only)		
Name of Sampler: Sample # Example A1 S 1 S 2 S 3 S 4 S 5 Client Sample # (s Relinquished (Clie Received (Lab): Comments/Specia	Shener Sample Location/Des Kitchen Sink/Tap (afetaria HW botween C Infront of CR HW botween LR Com (onterence can ): 	scription <u>R</u> <u>M</u> <u>and</u> <u>J</u> <u>b</u> <u>A</u> <u>c</u> <u>S</u> <u>and</u> <u>c</u> <u>b</u> <u>d</u> <u>p</u> <u>lann</u> <u>in</u>	Sample Type Water Afir 19 7 Total # of S	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Samples: © 7- Date: Date:	Test Code M017 Mcb) Jy P9 99 99 99 99	Area 100 mL 15 M 7 7 97 97 97 97 97 97 97 97 97 9	Collected 9/1/13 4:00 PM 12 04/20 31 4 4:00 PM 12 04/20 31 4:00 PM 12 04/20 12 04/20	(Lab Use Only) (Lab Use Only) (es / No EMSL ANAL/T BELTS//LL		
Name of Sampler: Sample # Example A1 S ( S 2. S 3 S 4 S 5 Client Sample # (s Relinquished (Clie Received (Lab): Comments/Specia	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween LR HW botween LR Room (onterence com	scription <u>R</u> <u>N</u> <u>and</u> <u>J</u> <u>b</u> <u>A</u> <u>c</u> <u>S</u> <u>and</u> <u>c</u> <u>b</u> <u>d</u> <u>plann</u> <u>in</u> <u>d</u> Conditions a	Sample Type Water A:r 9 19 7 Total # of S Page <u>1</u> are incorporated	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Date: Date: Date:	Test Code M017 Mcb) yy yy yy yy yy yy	Area 100 mL 25 A 77 97 97 97 97 97 97 97 97 97	Collected 9/1/13 4:00 PM 12 04/20 31 4 0 Chilled? Y 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	(Lab Use Only) (Lab Use Only) (es / No EMSL ANALL TION BELTSVILLEO		
Name of Sampler: Sample # Example A1 S 1 S 2 S 2 S 3 S 4 S 5 Client Sample # (s Relinquished (Clie Received (Lab): Comments/Specia EMSL Analytical, In to EMSL Analytical	Shener Sample Location/Des Kitchen Sink/Tap (a fetaria HW between C Infront of CR HW between LR Com (onterence can be for a fo	d Conditions a ce and ackno	Sample Type Water A:r 9 19 7 Total # of S Page <u>1</u> are incorporated	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Date: Date: Date:	Test Code M017 Mcb) yy yy yy yy yy yy	Area 100 mL 25 A 77 97 97 97 97 97 97 97 97 97	Collected 9/1/13 4:00 PM 12 04/20 37 4 0 Chilled? Y 1 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	(Lab Use Only) (Lab Use Only) (es / No EMSL ANALYTIC BELTSVILLED BELTSVILLED ssion of states		
Name of Sampler: Sample # Example A1 S 1 S 2 S 2 S 3 S 4 S 5 Client Sample # (s Relinquished (Clie Received (Lab): Comments/Specia EMSL Analytical, In to EMSL Analytical	Shener Sample Location/Des Kitchen Sink/Tap (afefaria HW botween C Infront of CR HW botween CR	d Conditions a ce and ackno	Sample Type Water A:r 9 19 7 Total # of S Page <u>1</u> are incorporated	Signature of Sam Potable/ NonPotable (Only for Waters) P NP P NP P NP P NP P NP P NP P NP Date: Date: Date:	Test Code M017 Mcb) yy yy yy yy yy yy	Area 100 mL 25 A 77 97 97 97 97 97 97 97 97 97	Collected 9/1/13 4:00 PM 12 04/20 31 4 0 Chilled? Y	(Lab Use Only) (Lab Use Only) (es / No EMSL ANALL TION BELTSVILLEO		

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

182003920

EMSL ANALYTICAL, INC. 200 ROUTE 130 NORTH CINNAMINSON, NJ 08077 PHONE: (800) 220-3675 FAX:(856) 786-0262

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Additional pages of the chain of custody are only necessary if needed for additional sample information

Sample #	Sample Location/Description	Sample Type	Potable/ NonPotable (Only for Waters)	Test Code	Volume/ Area	Date/Time Collected	Temperature (°C) (Lab Use Only)
56 57	Outside Field blank	Arr		V/00)	75ml	norela	(°C) .(Lab Use Only)
s7-	Field blanc	n	DP DNP	17	+1	••	2 - 2 - 2 - A - 2 - 2
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omments/Specia							

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EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this chain of custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Controlled Document - COC-34 Micro R8 11/14/2017

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### 182003920

GEN-FM-10-1: Sample Transfer-One Time Revision 4.2 Revision Date: 1/05/2016 Effective Date: 1/05/2016

# EMSL Analytical, Inc.

### Sample Transfer Form

· · · · ·									
Receiving Lab:	EMSL- BELTSV	<b>ILLE</b>		Phone Number:	3019375700				
				Fax Number:	3019375701				
Relinquished to:	EMSL- PLYMOUTH MEETING			Phone	8002203675				
				Number:					
				Fax Number:	8567860262				
Does new lab hold equ	uivalent or add	itional accr	editation? *		Yes No				
EMSL Customer ID #		SALU50				· · ·			
(if known):									
Client Name:		SALUT INC	2						
Client Project:		19-035/JC	HN EDGAR HO	WARD					
Tests to be Performed	:	M001							
Date Received:		12/4/20							
Date Relinquished:		12/7/20							
Date Due:		3 DAYS - D	OUE 12/9 @ 1:0	06 PM					
Special Instructions:									
(e.g. Work Order # , re	•								
qualifications, project	•								
procedures/modificati		<b>.</b>		(0) )					
Relinquished by (Signa	ature):	Date:	Received by	(Signature):		Date:			
J. Joswarth		12/7/20	2/7/20 13-80						
Relinquished by (Signa	ature):	Date!	Received by	(Signature):		Date:			
		-							
Customer Agreement-	Please sign for	m and send	to the receivi	ng laborator	y. By signing below, yo	bu agree to permit the			
	_			-	equivalent qualificatio	- ·			
final report will be issu	ed from the an	alyzing labo	oratory. Ensur	e any requir	rements are listed in sp	ecial instructions.			
Name (please print):					ent of:	Date:			
				ł					
If this is a recurring pro	niect or sample	l tvne that m	ny renuire com	i nnles to he r	elinquished on a regula	r hasis a Standina			
Agreement form must		iype muem	ay icquire suit		chiquistica on a regula	e ousis, a scananig			
* Receiving and analyzing		re of require	d qualifications	of project or	ior to transfer of samples				
			•						
Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the custor above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreemen						-			

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received, and then sign under Signature.