

# **BULLE ROCK REPORT**

**Posted September 18, 2020**



The City  
of  
Havre de Grace

Tim Whittie <timw@havredegracemd.com>

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## Re: Scanned image from MX-3570V

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Chris Carski -MDE- <chris.carski@maryland.gov>

Tue, Sep 15, 2020 at 7:30 AM

To: Tim Whittie <timw@havredegracemd.com>

Tim, I agree, the lab report confirms the City water supply is not causing the black substance, now identified as mold/fungi, found on plumbing fixtures in the Bulle Rock area.

Chris Carski  
Regulatory and Compliance Engineer Senior - MDE  
410.537.3743

On Thu, Sep 10, 2020 at 4:13 PM Tim Whittie <timw@havredegracemd.com> wrote:  
Chris;

The City believes that the attached laboratory report conclusively proves that the City water supply is not responsible for the mold/fungi in the fixtures in homes in the Bulle Rock Subdivision.

Thanks, Tim Whittie

----- Forwarded message -----

From: [system\\_notification@havredegracemd.com](mailto:system_notification@havredegracemd.com) <system\_notification@havredegracemd.com>  
Date: Thu, Sep 10, 2020 at 10:40 AM  
Subject: Scanned image from MX-3570V  
To: <timw@havredegracemd.com>

Reply to: Tim Whittie <timw@havredegracemd.com>  
Device Name: Not Set  
Device Model: MX-3570V  
Location: Not Set

File Format: PDF MMR(G4)  
Resolution: 200dpi x 200dpi

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Company: <b>Ken Montgomery</b>		EMSL Order Number: <b>3-2011817</b>		EMSL Analytical, Inc. 200 ROUTE 130 NORTH SANDHURST, NJ 08077 Third Party Billing requires written authorization (M0004-0001) BAX (888) 786-0282	
Address: <b>7th Kensington Ave</b>		State/Province: <b>MD</b>		Zip/Postal Code: <b>21076</b> Country: <b>USA</b>	
City: <b>Harwood</b>		Report To (Name): <b>Ken Montgomery / Tim Whittie</b>		Telephone #: <b>410 939 1800</b>	
Email Address: <b>KenM@HarwoodGraceMD.com</b>		Fax #:		Purchase Order:	
Project Name/Number: <b>Peace Chance (362001629)</b>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Connection Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	
U.S. State Samples Taken:		Turnaround Time (TAT) Options* - Please Check			
		<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements.					
Non Culturable Air Samples (Spore Traps) - Test Codes					
<input type="checkbox"/> M001 APC-Cell <input type="checkbox"/> M049 BioSIS <input type="checkbox"/> M030 Micro B		<input type="checkbox"/> M173 Allegro M2 <input type="checkbox"/> M003 Burkard <input type="checkbox"/> M174 MoldSnap		<input type="checkbox"/> M004 Allergenco <input type="checkbox"/> M043 Cyclex <input type="checkbox"/> M176 Relle Smart	
				<input type="checkbox"/> M032 Allergenco-D <input type="checkbox"/> M002 Cyclex-d <input type="checkbox"/> M130 Vlo-Cell	
				<input type="checkbox"/> M172 Versa Trap	
Other Microbiology Test Codes					
<input type="checkbox"/> M001 Fungal Direct Examination <input type="checkbox"/> M006 Viable Fungi ID and Count <input type="checkbox"/> M008 Viable Fungi ID and Count (Speciation) <input type="checkbox"/> M007 Culturable Fungi <input type="checkbox"/> M008 Culturable Fungi (Speciation) <input type="checkbox"/> M009 Grain Stain Culturable Bacteria <input type="checkbox"/> M010 Bacterial Count and ID - 3 Most Prominent <input type="checkbox"/> M011 Bacterial Count and ID - 5 Most Prominent <input type="checkbox"/> M013 Sewage Contamination in Buildings		<input type="checkbox"/> M014 Endotoxin Analysis <input type="checkbox"/> M015 Heterotrophic Plate Count <input type="checkbox"/> M180 Real Time qPCR-ERMI 36 Panel <input type="checkbox"/> M018 Total Coliform (Membrane Filtration) <input type="checkbox"/> M020 Fecal Streptococcus (Membrane Filtration) <input type="checkbox"/> M210-215 Legionella Detection <input type="checkbox"/> M026 Recreational Water Screen <input type="checkbox"/> M027 Mycotoxin Analysis		<input type="checkbox"/> M029 Enterococci <input type="checkbox"/> M019 Fecal Coliform <input type="checkbox"/> M133 MRSA Analysis <input type="checkbox"/> M028 Cryptococcus neoformans Detection <input type="checkbox"/> M120 Histoplasma capsulatum Detection <input type="checkbox"/> M033-39 Allergen Testing <input type="checkbox"/> M044 Group Allergen (Cat, Dog, Cockroach, Dustmites) <input type="checkbox"/> Other See Analytical Price Guide	
Preservation Method (Water):					
Name of Sampler: <b>Ken Montgomery</b>			Signature of Sampler: 		
Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
1	Kitchen	Air	M001	75L	7/1/12 4:30 PM
	Forest		M008		
<div style="float: right; text-align: right;">           RECEIVED            JUL 30 PM 2:08            SANITARIUM MD         </div>					
Client Sample # (s):		Total # of Samples:			
Relinquished (Client): <b>Ken Montgomery</b>		Date: <b>7/30/2012</b>		Time:	
Received (Client): <b>Beb</b>		Date: <b>7/30/2012</b>		Time: <b>1205P</b>	
Comments:					

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-0262

<http://www.EMSL.com>[cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

EMSL Order: 372011817

CustomerID: CHDG42

CustomerPO:

ProjectID:

Attn: **Ken Montgomery**  
**City of Havre De Grace**  
**711 Pennington Ave**  
**Havre De Grace, MD 21078**

Phone: (410) 939-1220  
Fax:  
Received: 07/30/20 12:05 PM  
Analysis Date: 8/11/2020  
Collected: 7/14/2020

Project: Peace Chance (362001629)

**Test Report: Identification and Enumeration of Culturable Fungi by Bulk (Including  
Speciation of Penicillium, Aspergillus, Cladosporium, and Stachybotrys  
(EMSL Method MICRO-SOP-202))**

Sample Description	Sample Location	Temp (C)	Sample Measure (Bulk)	Analytical Sensitivity (CFU/Bulk)	Dilution	Fungal Identification	Colony Count	CFUs (CFU/Bulk)	Percent of Total
1	Faucet	25	1	10,000	10000	<i>Cladosporium sphaerospermum</i>	3	30,000	5.1
372011817-0001	Media: MEA,CELL,CYA			1	1	<i>Fusarium sp.</i>	1	1	<1
				10,000	10000	<i>Phoma sp.</i>	56	560,000	94.9
<b>Total</b>							<b>60</b>	<b>590,000</b>	

No discernable blank was submitted with this group of samples

Analyst(s)

Zeljko Jurjevic (1)

Vincent Iuzzolino, M.S., Laboratory Director  
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 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. 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.

The detection limit is equal to 1 colony forming unit (CFU) per agar plate.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Accredited #100194

Initial report from 08/13/2020 15:32:35

①



**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

EMSL Order: 372011817  
CustomerID: CHDG42  
CustomerPO:  
ProjectID:

Attn: **Ken Montgomery**  
**City of Havre De Grace**  
**711 Pennington Ave**  
**Havre De Grace, MD 21078**

Phone: (410) 939-1220  
Fax:  
Received: 07/30/20 12:05 PM  
Analysis Date: 8/11/2020  
Collected: 7/14/2020

Project: **Peace Chance (362001629)**

**Test Report: Identification and Enumeration of Culturable Fungi by Bulk (Including  
Speciation of Penicillium, Aspergillus, Cladosporium, and Stachybotrys  
(EMSL Method MICRO-SOP-202))**

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372011817-0001	Media: MEA,CELL,CYA			1	1	<i>Fusarium sp.</i>	1	1	<1
				10,000	10000	<i>Phoma sp.</i>	56	560,000	94.9
<b>Total</b>							<b>60</b>	<b>590,000</b>	

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Initial report from 08/13/2020 15:32:35

①



EMSL ANALYTICAL, INC.



**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-0262

<http://www.EMSL.com>[cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

EMSL Order: 372011818

CustomerID: CHDG42

CustomerPO: .

ProjectID:

Attn: **Ken Montgomery**  
**City of Havre De Grace**  
**711 Pennington Ave**  
**Havre De Grace, MD 21078**

Phone: (410) 939-1220  
Fax:  
Received: 07/30/20 12:05 PM  
Analysis Date: 8/7/2020  
Collected:

Project: Monarchos (362001630)

**Test Report: Identification and Enumeration of Culturable Fungi by Bulk (Including  
Speciation of Penicillium, Aspergillus, Cladosporium, and Stachybotrys  
(EMSL Method MICRO-SOP-202))**

Sample Description	Sample Location	Temp (C)	Sample Measure (Bulk)	Analytical Sensitivity (CFU/Bulk)	Dilution	Fungal Identification	Colony Count	CFUs (CFU/Bulk)	Percent of Total
1	Faucet	25	1	1000	1000	<i>Fusarium sp.</i>	1	1000	4.3
372011818-0001	Media: MEA,CELL,CYA			1000	1000	Yeast	22	22,000	95.7
<b>Total</b>							<b>23</b>	<b>23,000</b>	

No discernable blank was submitted with this group of samples

Analyst(s)

Zeljko Jurjevic (1)

Vincent Iuzzolino, M.S., Laboratory Director  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC--EMLAP Accredited #100194

Initial report from 08/11/2020 12:36:52

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-0262

<http://www.EMSL.com>[cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

EMSL Order: 372011818

CustomerID: CHDG42

CustomerPO:

ProjectID:

Attn: **Ken Montgomery**  
**City of Havre De Grace**  
**711 Pennington Ave**  
**Havre De Grace, MD 21078**

Phone: (410) 939-1220  
Fax:  
Received: 07/30/20 12:05 PM  
Analysis Date: 8/7/2020  
Collected:

Project: Monarchos (362001630)

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Initial report from 08/11/2020 12:36:52





## Materials Science Chain of Custody

EMSL Order Number (Lab Use Only):

#362001630

RECEIVED  
EMSL  
CINNAMINSON, NJ  
EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 858-1580

20 JUL 15 AM 11:36

Company: <u>City of Havre de Grace</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party	
Street: <u>711 Pennington Ave</u>			
City: <u>Havre de Grace</u>	State/Province: <u>MD</u>	Zip/Postal Code: <u>21078</u>	Country: <u>USA</u>
Report To (Name): <u>Tim Whittie / Ken Montgomery</u>		Fax #:	
Telephone #: <u>410 939 1220</u> <u>410 939 1800</u>		Email Address: <u>Ken M @ Havre de Grace MD</u>	
Project Name/Number: <u>Monarchos</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: U.S. State Samples Taken In:	
Turnaround Time (TAT) Options – Please Check			
<input checked="" type="checkbox"/> 2 Week		<input type="checkbox"/> Expedited (Please call for information) TAT:	
Test Type			
<input type="checkbox"/> Common Particle ID (large particles)	<input type="checkbox"/> Physical Testing (Tensile, Compression, etc.)	<input type="checkbox"/> MMVF's (fibrous glass, mineral wool, RCF's)	
<input type="checkbox"/> Full Particle ID (environmental dust)	<input type="checkbox"/> FTIR/NIR (Polymers, Lubricants)	<input type="checkbox"/> Particle Size (Sieve, Microscopy, or Laser-select one)	
<input checked="" type="checkbox"/> Basic Material ID (solids)	<input type="checkbox"/> X-Ray Fluorescence (elemental analysis)	<input type="checkbox"/> Combustible Dust (Core Module, MIE, MEC, Kst, etc.)	
<input checked="" type="checkbox"/> Advanced Material ID (liquids and solids, industrial residues)	<input type="checkbox"/> X-Ray Diffraction (Crystalline Particles)	<input type="checkbox"/> Petrographic Examination of Concrete, Soil, Stone	
Combustion-by-products (soot, char, ash, carbon black)			
<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4			
<input type="checkbox"/> Other (Please Explain): <u>Generic I.D.</u> <u>(If found to be mold/Bacteria please send to Micro dept)</u>			
All orders for clients who do not have established accounts with EMSL Analytical must be accompanied by payment in form of a check or credit card. After your first order, EMSL reserves the right to establish an account and assign credit terms of Net 30 or COD based on credit evaluation and or frequency of sample submittal. To establish a permanent account, you must be able to submit samples on a regular basis at a minimum of five times per year. EMSL reserves the right to make adjustments or changes to this policy as deemed necessary by business requirements.			
Samplers Name: <u>Ken Montgomery</u>		Samplers Signature: <u>[Signature]</u>	
Sample #	Sample Description	Volume	Date/Time Sampled
<u>1</u>	<u>Faucet Collection</u>	<u>Seals 11:00AM</u>	<u>7/14/20</u>
Client Sample # (s): <u>1</u>		Total # of Samples: <u>1</u>	
Relinquished (Client): <u>[Signature]</u>	Date: <u>7/14/20</u>	Time: <u>11:40AM</u>	
Received (Lab): <u>OKAS</u>	Date: <u>7-15-20</u>	Time: <u>11:32</u>	
Comments:			



Beatty, Brittany

#362001630

**From:** Ken Montgomery <kenm@havredegracemd.com>  
**Sent:** Wednesday, July 15, 2020 1:20 PM  
**To:** Beatty, Brittany  
**Subject:** Re: Peacechance Project

[EXTERNAL E-MAIL]

2 weeks is sufficient please.  
Regards  
Ken Montgomery

On Wed, Jul 15, 2020 at 1:17 PM Beatty, Brittany <bbeatty@emsl.com> wrote:

Good Afternoon,

Please provide a turnaround time for the samples received today.

Thank you,



Brittany Beatty | [Log In](#)

EMSL Analytical, Inc. | [200 Route 130 North](#) | Cinnaminson, NJ 08077

Phone: 856-858-4800 | Fax: 856-786-5974 | Toll Free: 800-220-3675

**COVID-19 Update:** EMSL Analytical, Inc. remains open as an essential business. To view real-time status updates for each of our 45 laboratories in the US and Canada, download EMSL's free smart device application via the [iTunes App Store](#) - [Apple](#) or [Google Play](#). APP updates are posted under Support / Lab Hours.



EMSL ANALYTICAL, INC.

Ken Montgomery  
City of Havre de Grace  
711 Pennington Ave  
Havre de Grace, MD 21078  
Phone: 410-939-1800  
Email: [kenm@havredegrace.com](mailto:kenm@havredegrace.com)

Date of quote: June 10, 2020  
Client ID: +36HAVD13

Prepared By: J. Passero  
Quote ID: J.061020.0549

**Materials Science Division  
Quotation for Analytical Services**

Purpose of Analysis: Identification of black substance from water distribution system.

Sample Type: Black substance (provided by the client).

Analytical Proposal: Perform testing on provided material by appropriate analytical techniques (see below).

Quoted services:

Analysis	Turnaround Time	Price Per Sample
Material Identification	10 business days	\$663.00
	5 business days	\$995.00
	4 business days	\$1,193.00
	3 business days	\$1,459.00
	2 business days	\$1,823.00

If this quote for analytical services is acceptable please sign the supplied space below and submit this page with the samples at EMSL -200 Route 130 North, Cinnaminson, NJ 08077. Unless specified in writing, quoted pricing expires if work is not submitted within 60 days.

Thank you for your interest in EMSL Analytical, Inc.

Quote Approved by: \_\_\_\_\_

*Client Signature*

\_\_\_\_\_  
*Date*

Clients who do not have established accounts with EMSL Analytical must submit with the samples payment in form of a check or credit card. EMSL reserves the right to establish an account and assign credit terms of Net 30 or COD based on credit evaluation and or frequency of sample submittal. To establish a permanent account, you must be able to submit samples on a regular basis at a minimum of five times per year. EMSL reserves the right to make adjustments or changes to this policy as deemed necessary by business requirements.

EMSL's Terms and Conditions for Purchase of Laboratory Services apply.



**EMSL Analytical, Inc.**

200North, Route 130, Cinnaminson, NJ. 08077  
Phone: (800) 220-3675

Attn.: Ken Montgomery/ Tim Whittie  
City of Havre de Grace  
711 Pennington Avenue  
Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001630  
Sample(s) Received: 7/15/2020  
Date Reported: 7/29/2020  
Date Printed: 7/29/2020  
Reported By: J.Newton

**- Laboratory Report -**  
**Materials Identification**  
**Project: Monarchos**

**Conclusions:**

The data obtained during analysis indicates the following.

Sample 1 was found to be composed of mold and bacteria growth.

**Procurement of Samples and Analytical Overview:**

The sample submitted for analysis arrived at EMSL Analytical (Cinnaminson, NJ) on 7/15/2020. The package arrived in satisfactory condition with no evidence of damage to the contents. The data reported herein has been obtained using the following equipment and methodologies.

Methods & Equipment: Polarized Light Microscopy (PLM) – **Zeiss, Universal Petrographic Microscope**  
Reflected Light Microscopy (RLM) – **Nikon, DF Microscope**  
Phase Contract Microscopy (PCM) – **Zeiss, Axioplan 2**

Analyzed by:

John Newton  
Senior Materials Scientist

28 July 2020

Date

Reviewed/Approved by :

Eugenia Mirica, Ph.D.  
Laboratory Manager

29 July 2020

Date





**EMSL Analytical, Inc.**

200North, Route 130, Cinnaminson, NJ. 08077  
Phone: (800) 220-3675

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Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001630  
Sample(s) Received: 7/15/2020  
Date Reported: 7/29/2020  
Date Printed: 7/29/2020  
Reported By: J.Newton

**Background:**

A sample was submitted for analysis. The purpose of the analysis was to identify the material present.

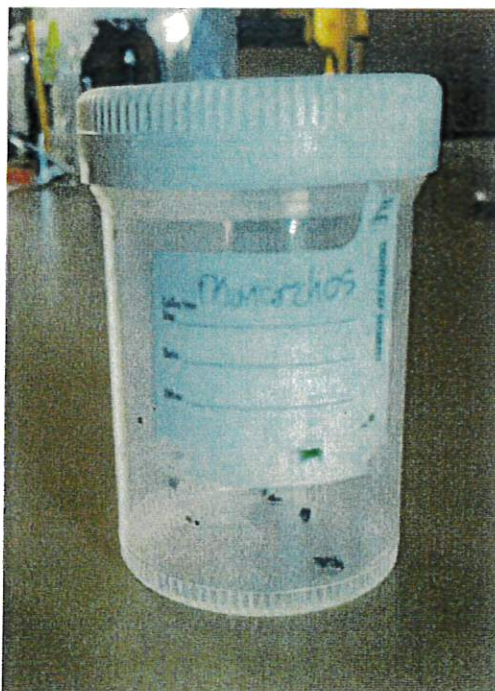


Figure 1: Samples as received for analysis.

Sample ID	Description	Date/Time Sampled
1	Faucet Collection	7/14/2020 11:00

**Sample Preparation:**

The sample was analyzed in its as-received condition.



**EMSL Analytical, Inc.**

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City of Havre de Grace  
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Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001630  
Sample(s) Received: 7/15/2020  
Date Reported: 7/29/2020  
Date Printed: 7/29/2020  
Reported By: J.Newton

**Results and Discussion:**

EMSL ID:	362001630-0001		
Sample ID:	1		
Description:	Faucet Collection		
Grouping	Analyte	Relevance/ Contribution	Comments
Solid Materials:	None Detected	ND	A
Biological Organisms:	Fungal Growth Bacteria	95 – 99% 1 – 5%	B
Liquids and Residues:	Water	Not Determined	C

**Comments:**

- A No non-biological solids were observed in the sample.
- B The material present is predominantly composed of fungal growth with sporulation. Bacterial formations are also present.
- C The sample was found to contain water which was expected and not included in quantitation.



*EMSL Analytical, Inc.*

200North, Route 130, Cinnaminson, NJ. 08077  
Phone: (800) 220-3675

Attn.: Ken Montgomery/ Tim Whittie  
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711 Pennington Avenue  
Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001630  
Sample(s) Received: 7/15/2020  
Date Reported: 7/29/2020  
Date Printed: 7/29/2020  
Reported By: J.Newton

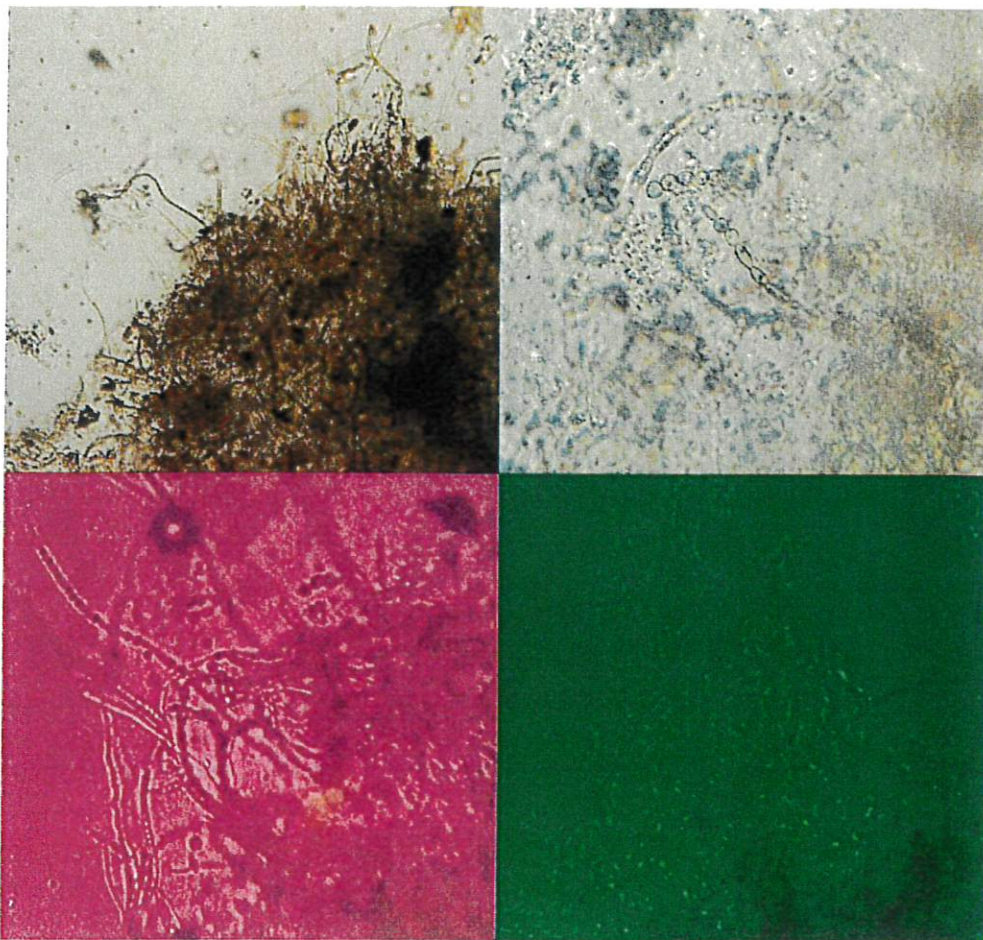


Figure 2: PLM and PCM images of sample 1 showing the fungal growth with bacteria.





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200North, Route 130, Cinnaminson, NJ. 08077  
Phone: (800) 220-3675

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Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001630  
Sample(s) Received: 7/15/2020  
Date Reported: 7/29/2020  
Date Printed: 7/29/2020  
Reported By: J.Newton

**Descriptions & Definitions:**

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Limit of Quantitation (LOQ): The minimum concentration of an analyte that can be measured within specified limits of precision and accuracy during routine laboratory operating conditions

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VAE technique estimates the relative projected area of a certain type of particulate from a mixture of particulate by comparison to data derived from analysis of calibration materials having similar texture and particulate content. Due to bi-dimensional nature of the measurements, in some cases the particle thickness could affect the results.

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**Warranty:** EMSL warrants to its clients that all services provided hereunder shall be performed in accordance with established and recognized analytical testing procedures, when available. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied. EMSL disclaims any other warranties, express or implied, including a warranty of fitness for particular purpose and warranty of merchantability.

**Limits of Liability:** In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. EMSL will not be held responsible for the improper selection of sampling devices even if we supply the device to the user. The user of the sampling device has the sole responsibility to select the proper sampler and sampling conditions to insure that a valid sample is taken for analysis. Any resampling performed will be at the sole discretion of EMSL, the cost of which shall be limited to the reasonable value of the original sample delivery group (SDG) samples. In no event shall EMSL be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder.

The data and other information contained in this report, as well as any accompanying documents, represent only the samples analyzed. They are reported upon the condition that they are not to be reproduced wholly or in part for advertising or other purposes without the written approval from the laboratory.



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Materials Science Chain of Custody

EMSL Order Number (Lab Use Only):

#362001629

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 224-3675  
FAX: (856) 858-1580

20 JUL 15 AM 11:36

Company: <u>City of Havre de Grace</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party	
Street: <u>711 Pennington Ave</u>			
City: <u>Havre de Grace</u>	State/Province: <u>MD</u>	Zip/Postal Code: <u>21078</u>	Country: <u>USA</u>
Report To (Name): <u>Tim Whittie / Ken Montgomery</u>		Fax #:	
Telephone #: <u>410 939 1220 410 939 1800</u>		Email Address: <u>KenM@Havre de Grace MD.com</u>	
Project Name/Number: <u>Peacechance</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken In:
Turnaround Time (TAT) Options – Please Check			
<input type="checkbox"/> 2 Week		<input type="checkbox"/> Expedited (Please call for information) TAT:	
Test Type			
<input type="checkbox"/> Common Particle ID (large particles)	<input type="checkbox"/> Physical Testing (Tensile, Compression, etc.)	<input type="checkbox"/> MMVF's (fibrous glass, mineral wool, RCF's)	
<input type="checkbox"/> Full Particle ID (environmental dust)	<input type="checkbox"/> FTIR/NIR (Polymers, Lubricants)	<input type="checkbox"/> Particle Size (Sieve, Microscopy, or Laser-select one)	
<input type="checkbox"/> Basic Material ID (solids)	<input type="checkbox"/> X-Ray Fluorescence (elemental analysis)	<input type="checkbox"/> Combustible Dust (Core Module, MIE, MEC, Kst, etc.)	
<input checked="" type="checkbox"/> Advanced Material ID (liquids and solids, industrial residues)	<input type="checkbox"/> X-Ray Diffraction (Crystalline Particles)	<input type="checkbox"/> Petrographic Examination of Concrete, Soil, Stone	
Combustion-by-products (soot, char, ash, carbon black)			
<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4			
<input type="checkbox"/> Other (Please Explain) <u>Generic I.D.</u> <u>(If found) to be Mold/Bacteria please forward to micro dept for further anal</u>			
All orders for clients who do not have established accounts with EMSL Analytical must be accompanied by payment in form of a check or credit card. After your first order, EMSL reserves the right to establish an account and assign credit terms of Net 30 or COD based on credit evaluation and or frequency of sample submittal. To establish a permanent account, you must be able to submit samples on a regular basis at a minimum of five times per year. EMSL reserves the right to make adjustments or changes to this policy as deemed necessary by business requirements.			
Samplers Name: <u>Ken Montgomery</u>		Samplers Signature:	
Sample #	Sample Description	Volume	Date/Time Sampled
<u>1</u>	<u>Faucet Collection</u>	<u>Scrapes 11:2AM</u>	<u>7/14/20</u>
Client Sample # (s):		Total # of Samples: <u>1</u>	
Relinquished (Client): <u>[Signature]</u>	Date: <u>7/14/20</u>	Time: <u>11:40 AM</u>	
Received (Lab): <u>CB</u>	Date: <u>7 15.20</u>	Time: <u>11:42</u>	
Comments:			



Beatty, Brittany

#362001629

**From:** Ken Montgomery <kenm@havredegracemd.com>  
**Sent:** Wednesday, July 15, 2020 1:20 PM  
**To:** Beatty, Brittany  
**Subject:** Re: Peacechance Project

[EXTERNAL E-MAIL]

2 weeks is sufficient please.  
Regards  
Ken Montgomery

On Wed, Jul 15, 2020 at 1:17 PM Beatty, Brittany <[bbeatty@emsl.com](mailto:bbeatty@emsl.com)> wrote:

Good Afternoon,

Please provide a turnaround time for the samples received today.

Thank you,



Brittany Beatty | [Log In](#)

EMSL Analytical, Inc. | [200 Route 130 North](#) | Cinnaminson, NJ 08077

Phone: 856-858-4800 | Fax: 856-786-5974 | Toll Free: 800-220-3675

**COVID-19 Update:** EMSL Analytical, Inc. remains open as an essential business. To view real-time status updates for each of our 45 laboratories in the US and Canada, download EMSL's free smart device application via the [iTunes App Store - Apple](#) or [Google Play](#). APP updates are posted under Support / Lab Hours.



#362001629



EMSL ANALYTICAL, INC.

Ken Montgomery  
City of Havre de Grace  
711 Pennington Ave  
Havre de Grace, MD 21078  
Phone: 410-939-1800  
Email: [kenm@havredegrace.com](mailto:kenm@havredegrace.com)

Date of quote: June 10, 2020  
Client ID: +36HAVD13

Prepared By: J. Passero  
Quote ID: J.061020.0549

**Materials Science Division  
Quotation for Analytical Services**

Purpose of Analysis: Identification of black substance from water distribution system.

Sample Type: Black substance (provided by the client).

Analytical Proposal: Perform testing on provided material by appropriate analytical techniques (see below).

Quoted services:

Analysis	Turnaround Time	Price Per Sample
Material Identification	10 business days	\$663.00
	5 business days	\$995.00
	4 business days	\$1,193.00
	3 business days	\$1,459.00
	2 business days	\$1,823.00

If this quote for analytical services is acceptable please sign the supplied space below and submit this page with the samples at EMSL- -200 Route 130 North, Cinnaminson, NJ 08077. Unless specified in writing, quoted pricing expires if work is not submitted within 60 days.

Thank you for your interest in EMSL Analytical, Inc.

Quote Approved by: \_\_\_\_\_

*Client Signature*

\_\_\_\_\_  
*Date*

Clients who do not have established accounts with EMSL Analytical must submit with the samples payment in form of a check or credit card. EMSL reserves the right to establish an account and assign credit terms of Net 30 or COD based on credit evaluation and or frequency of sample submittal. To establish a permanent account, you must be able to submit samples on a regular basis at a minimum of five times per year. EMSL reserves the right to make adjustments or changes to this policy as deemed necessary by business requirements.

EMSL's Terms and Conditions for Purchase of Laboratory Services apply.



**EMSL Analytical, Inc.**

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Phone: (800) 220-3675

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711 Pennington Avenue  
Havre de Grace, MD. 21078  
[kenm@havredegracemd.com](mailto:kenm@havredegracemd.com)  
Phone: 410-939-1220

EMSL Order No.: 362001629  
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**- Laboratory Report -**  
**Materials Identification**  
**Project: Peacechance**

**Conclusions:**

The data obtained during analysis indicates the following.

Sample 1 was found to be composed of mold and bacteria growth.

**Procurement of Samples and Analytical Overview:**

The sample submitted for analysis arrived at EMSL Analytical (Cinnaminson, NJ) on 7/15/2020. The package arrived in satisfactory condition with no evidence of damage to the contents. The data reported herein has been obtained using the following equipment and methodologies.

Methods & Equipment: Polarized Light Microscopy (PLM) – **Zeiss, Universal Petrographic Microscope**  
Reflected Light Microscopy (RLM) – **Nikon, DF Microscope**  
Phase Contract Microscopy (PCM) – **Zeiss, Axioplan 2**

Analyzed by:

*John Newton*  
Senior Materials Scientist

28 July 2020

*Date*

Reviewed/Approved by :

*Eugenia Mirica, Ph.D.*  
Laboratory Manager

29 July 2020

*Date*



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**Results and Discussion:**

EMSL ID:	362001629-0001		
Sample ID:	1		
Description:	Faucet Collection		
Grouping	Analyte	Relevance/ Contribution	Comments
Solid Materials:	None Detected	ND	A
Biological Organisms:	Fungal Growth Bacteria	95 – 99% 1 – 5%	B
Liquids and Residues:	Water	Not Determined	C

**Comments:**

- A No non-biological solids were observed in the sample.
- B The material present is predominantly composed of fungal growth with sporulation. Bacterial formations are also present.
- C The sample was found to contain water which was expected and not included in quantitation.





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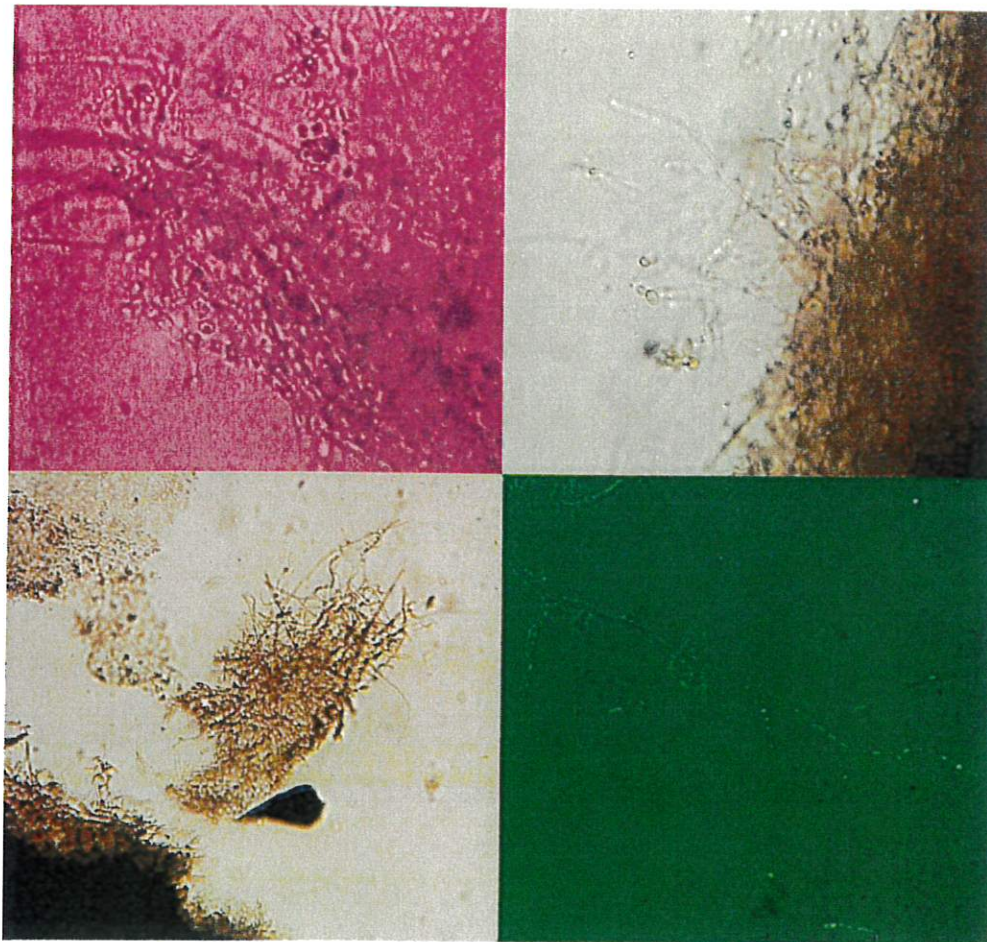


Figure 2: PLM and PCM images of sample 1 showing the fungal growth with bacteria.



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