



January 6, 2017

Jane Example  
0 Any Street, # 100  
Clearwater, FL

Re: **0 Any Street, # 100**  
**Laboratory Analysis Report**  
**Work Authorization # 00099- 020885**

Dear Jane Example,

We appreciate the opportunity to provide you with our professional indoor environmental laboratory services. The following environmental assays were performed on the samples submitted by you:

- **Indoor Allergen Screen** - dust mite screen check

Please call me at 1-800-422-7873, ext. 301, should you have any questions. We look forward in assisting you to create a healthy indoor environment for you and your organization.

Sincerely,

A handwritten signature in black ink that reads "Rajiv Sahay".

Dr. Rajiv Sahay, CIAQP, FIAS  
EDL Laboratory Director



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Corporate Office

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# Laboratory Analysis Report Indoor Allergen Screen

Client : **Mrs. Jane Example**  
Jobsite : **Ms. Jane Example Residence**  
Location : **Sample Residence**

PACS ID# : **00099**  
Work Order # : **020885**  
Project Date : **1/4/2016**  
Date Issued : **1/6/2017**

Unit : **N/A**  
Zone : **Bedroom**  
Testsite : **Bed**

Sample # : **132**      Analysis Method : **DustScreen**  
Field Sample # : **1**      Performed By: **EDLab**  
Sample Type : **Dustmite Allergen Screen (RapidTest)**

Sample Date : **1/3/2017**  
Sample Time : **12:00**  
Diagnostic Tech : **LAB**

Dust Mites Group 2

Medium

**MODERATE**

\* Please refer to the Endnotes on page # 2 of this report for explanations of abbreviations, Detection Limits, Guidelines and References.

The results in this report apply only to the sample(s) specifically listed above and tested at Environmental Diagnostics Laboratory. Unless otherwise noted, samples were received in good condition. Laboratory-prepared Quality Control (QC) samples are analyzed with the samples routinely; however, unless a blank (control) is received, the result for the control is not compared.

Quality Controlled By : 

Approved By :   
**Rajiv R. Sahay, Ph.D.**

## Laboratory Analysis Report Indoor Allergen Screen

### Endnotes:

#### Allergen

Cat (Fel. d. 1)	Major cat allergen expressed as micrograms per gram of dust
Cockroach (Bla g. 2)	Major group 2 allergen of <i>Blattella germanica</i> (German cockroach) expressed as micrograms per gram of dust
Dog (Can. f. 1)	Major dog allergen expressed as micrograms per gram of dust
Dust Mites (Der. f. 1)	Major allergen of <i>Dermatophagoides farinae</i> (dust mites) expressed as micrograms per gram of dust
Dust Mites (Der. p. 1)	Major allergen of <i>Dermatophagoides pteronyssinus</i> (dust mites) expressed as micrograms per gram of dust

#### Detection Limits

0.004 µg/g
0.196 µg/g
0.012 µg/g
0.012 µg/g
0.012 µg/g

#### Abbreviations

<b>BDL</b>	= Below Detection Limit (see at left for Detection Limits of each Allergen)
<b>QNS</b>	= Quantity Not Sufficient (Size of sample not sufficient to perform assay)
<b>N/A</b>	= Not Applicable
<b>N/D</b>	= Not Done

#### Reference Citations

- 1 J. Allergy Clin Immunol 1989; 83:416-427
- 2 Amer Rev Respir Dis 1990; 141:361-367
- 3 Amer Rev Respir Dis 1993; 147:573-578
- 4 Amer J Respir Crit Care Med 1997; 155:94-98
- 5 J. Allergy Clin Immunol 1997; 100:S1-S24
- 6 Pediatric Allergy Principles and Practice 2003; 261-68

**Guidelines:** The following guidelines for *Dermatophagoides* mite, cat, dog and cockroach allergen levels in house dust have been proposed: [1, 2, 3, 6]

**Cat/Dog** The results of two studies have observed that increased exposure to high levels of Fel d 1 and Can f 1 have caused individuals to develop a tolerance, which means that individuals could potentially be exposed to 8-20 mg/g dust and only experience mild allergic symptoms. Individuals with less exposure to high levels of Fel d 1 and Can f 1 (1-8 mg/g dust) may experience more severe allergic symptoms. [2, 4, 6]

**Cockroach** Allergen exposure threshold levels for sensitization have been published in Units/g dust. Some investigators feel that any detectable level of cockroach allergen is clinically significant because its presence identifies a building in which persons who are cockroach allergic are at risk to develop symptoms because of exposure. [5, 6]

<b>LOW</b>	= (not sufficient to cause allergic symptoms)	<u>Cat (Fel. d. 1)</u>	<u>Cockroach (Bla g. 1)</u>	<u>Cockroach (Bla g. 2)</u>	<u>Dog (Can. f. 1)</u>	<u>Dust Mites Group 1</u>	<u>Dust Mites Group 2</u>
<b>MODERATE</b>	= (risk for sensitization and bronchial hyperactivity)	< 0.2 µg/g	< 1 U/g	< 0.2 µg/g	< 0.2 µg/g	< 2 µg/g	< 0.2 µg/g
<b>HIGH</b>	= (risk for acute asthmatic attack)	0.2 - 1 µg/g	1 - 8 U/g	0.2 - 1 µg/g	0.2 - 1 µg/g	2 - 10 µg/g	0.2 - 1 µg/g
		> 1 µg/g	> 8 U/g	> 1 µg/g	> 1 µg/g	> 10 µg/g	> 1 µg/g

\* This report furnishes information only and is not intended to be an interpretation of the results. Whether an individual suffers allergic symptoms or not depends not only on the level of allergens in his/her environment, but also, on his/her medical history and previous exposure.

\* Allergen Analysis performed using the DustScreen method by Indoor Biotechnologies.

\* Please refer to the Endnotes on page # 2 of this report for explanations of abbreviations, Detection Limits, Guidelines and References.

The results in this report apply only to the sample(s) specifically listed above and tested at Environmental Diagnostics Laboratory. Unless otherwise noted, samples were received in good condition. Laboratory-prepared Quality Control (QC) samples are analyzed with the samples routinely; however, unless a blank (control) is received, the result for the control is not compared.

Quality Controlled By : 

Approved By :   
Rajiv R. Sahay, Ph.D.



Client: Jane Example  
Jobsite: Ms. Jane Example Residence  
Location: Sample Residence  
PACS ID#: 00099  
Work Order #: 020885

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**End of Report**

**APPENDIX 1**

IEQ PARAMETERS	GUIDELINES			UNITS
	LOW	MODERATE	HIGH	
<b>Comfort</b>				
Temperature - Summer	73-79 <sup>1</sup>			°F
Temperature - Winter	68-74 <sup>1</sup>			°F
Relative Humidity	30-60 <sup>1</sup>			%
Carbon Dioxide	700 + Outside Air <sup>2</sup>			ppm + Outside Air
<b>Microbiology</b>				
Bioaerosol - Bacteria, CFU	175 <sup>3</sup>	176 - 349	350	CFU/m <sup>3</sup>
Bioaerosol - Fungi, CFU	350 <sup>3</sup>	351 - 699	700	CFU/m <sup>3</sup>
Bulk - Bacteria	50000	50001 - 99999	100000	CFU/m <sup>3</sup>
Bulk - Fungi	75000	75001 - 149999	150000	CFU/m <sup>3</sup>
Swab - Bacteria	170000	170001 - 339999	340000	CFU/m <sup>3</sup>
Swab - Fungi	3000	3001 - 5999	6000	CFU/m <sup>3</sup>
Water - Bacteria	40000	40001 - 79999	80000	CFU/m <sup>3</sup>
Water - Fungi	30	31 - 59	60	CFU/m <sup>3</sup>
<b>Aerobiology (Spore Trap Assays)</b>				
Opaque Particles	35000	35001 - 69999	70000	cts/m <sup>3</sup>
Skin Cell Fragments	7500	7501 - 14999	15000	cts/m <sup>3</sup>
Insect Biodetritus	200	201 - 599	400	cts/m <sup>3</sup>
Fibers	500	501 - 999	1000	cts/m <sup>3</sup>
Fibers - Fiberglass	5	6 - 9	10	cts/m <sup>3</sup>
Pollen	15	16 - 29	30	cts/m <sup>3</sup>
Fungal Elements	1000	1001 - 1999	2000	cts/m <sup>3</sup>
Other	6000	6001 - 11999	12000	cts/m <sup>3</sup>
<b>Microscopy (Tape Prep Assays)</b>				
Opaque Particles	3000	3001 - 5999	6000	cts/cm <sup>2</sup>
Skin Cell Fragments	600	601 - 1199	1200	cts/cm <sup>2</sup>
Insect Biodetritus	4	5 - 7	8	cts/cm <sup>2</sup>
Fibers	120	121 - 239	240	cts/cm <sup>2</sup>
Fibers - Fiberglass	4	5 - 11	12	cts/cm <sup>2</sup>
Pollen	4	5 - 7	8	cts/cm <sup>2</sup>
Fungal Elements	50 <sup>5</sup>	51 - 99	100	cts/cm <sup>2</sup>
Other	650	651 - 1299	1300	cts/cm <sup>2</sup>
<b>Allergen Screen</b>				
Dust Mites - Der p 1	-	-	-	µg/g
Dust Mites - Der f 1	-	-	-	µg/g
Dust Mites Group 1 (Der p1 + Der f1)	2 <sup>6,7,8,11</sup>	3 - 9	10	µg/g
Dust Mites Group 2	0.2 <sup>12</sup>	0.3 - 0.9	1.0	µg/g
Cat (Fel d 1)	0.2 <sup>7,9,11</sup>	0.3 - 0.9	1.0	µg/g
Dog (Can f 1)	0.2 <sup>7,9,11</sup>	0.3 - 0.9	1.0	µg/g
Mouse (Mus m 1)	n/a	-	n/a	µg/g
Rat Protein	n/a	-	n/a	µg/g
Cockroach (Bla g 1)	1 <sup>10,11</sup>	1.1 - 7.9	8	Units/g
Cockroach (Bla g 2)	0.2 <sup>10,11</sup>	0.3 - 0.9	1	µg/g
Horse	n/a	-	n/a	µg/g
Endotoxins	n/a	-	n/a	n/a
<b>"Other"</b>				
Airborne Particulates	25000	25001 - 49999	50000	p/l (prtcls. per liter of air)
Moisture Content	0-35 <sup>13</sup>	36-50	51-100	%

n/a = not enough data

**References:**

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| <ol style="list-style-type: none"> <li>1. ANSI/ASHRAE Standard 55-2004</li> <li>2. ANSI/ASHRAE Standard 62.1-2010</li> <li>3. Mold. June 2005; Harris Martin Columns.</li> <li>4. CDC (Centers for Disease Control) Guidelines - TBD</li> <li>5. Ind. J. Aerobiol 2008; Vol. 21, No.1: 13-23</li> <li>6. J. Allergy Clin Immunol 1989; 83:416-427</li> <li>7. Amer Rev Respir Dis 1990; 141:361-367</li> </ol> | <ol style="list-style-type: none"> <li>8. Amer Rev Respir Dis 1993; 147:573-578</li> <li>9. Amer J Res Crit Care Med 1997; 155:94-98</li> <li>10. J. Allergy Clin Immunol 1997; 100:S1-S24</li> <li>11. Pediatric Allergy Principles and Practice 2003; 261-68</li> <li>12. Indoor Biotechnologies, Ltd., "Rapid Test for Dust Mites" Guidelines,</li> <li>13. Tramex Moisture Meter Manufacturer Recommendations</li> </ol> |
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