Analytical	Technologies, L.L.C.	
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Indoor Air Quality Summary				
Client:	Indoor Environmental Testing	Sample Number:	4909 - 1	
Project:	David Kallie	Date Sampled:	10/23/2019	
Location:	W238N7540 Highridge Dr.	Order Date:	10/28/2019	
Sampled By:	Martine Davis	Date Analyzed:	11/01	
Submitter ID:	Main Floor	Date Reported:	11/04/2019	
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### IAQ Summary

Total VOCs (TVOC), ng/L: 180

Mold VOCs (TMVOC), ng/L: < 1

Sample Volume (L): 40 Notes: -

### Understanding the Results:

#### TVOC (Total Volatile Organic Compounds)

No federal or state agency has specified a specific limit for Total Volatile Organic Compounds (TVOCs) in indoor air; however, several members of the European Union and the U. S. Green Building Council (USGBC) have recommended 500 ng/L as the limit. Note that if all of the TVOC is the result only one or a small number of components, a hazardous condition may still exist.

In homes, usually, TVOC levels below 200 ng/L indicate that the Indoor Air Quality (IAQ) is "Ideal," TVOC levels between 200 and 300 ng/L indicate that the IAQ is "Good," TVOC levels between 300 and 400 ng/L indicate that the IAQ is "Acceptable," and TVOC levels between 400 and 500 ng/L indicate that the IAQ is "Marginal." TVOC levels above 500 ng/L indicate that a problem may exist and it should be addressed.

In commercial buildings, TVOC levels below 200 ng/L indicate that the IAQ is "Ideal," TVOC levels between 200 and 350 ng/L indicate that the IAQ is "Good," TVOC levels between 350 and 500 ng/L indicate that the IAQ is "Acceptable," and TVOC levels between 500 and 700 ng/L indicate that the IAQ is "Marginal." TVOC levels above 700 ng/L indicate that a problem may exist and it should be addressed.

In production and manufacturing facilities, TVOC levels below 500 ng/L indicate that the IAQ is "Ideal," TVOC levels between 500 and 700 ng/L indicate that the IAQ is "Good," TVOC levels between 700 and 1,000 ng/L indicate that the IAQ is "Acceptable," and TVOC levels between 1,000 and 1,500 ng/L indicate that the IAQ is "Marginal." TVOC levels above 1500 ng/L indicate that a problem may exist and it should be addressed.

In all cases, exposure effects are possible with TVOC levels between 1,500 and 3,000 and exposure effects are probable at TVOC levels above 3,000 ng/L. Exposure effects may include eye and respiratory irritation, headaches, drowsiness, nausea, general malaise, etc.

Based on what the individual compounds are that make up the TVOC, it is possible to suggest actions which will lower the level into an acceptable range. Contact the person who took this sample for more information.

# Fike Analytical Technologies, L.L.C.

## Indoor Air Quality Summary

## Understanding the Results:

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## TMVOC (Total Mold Volatile Organic Compounds)

This is an assessment of the quantity of actively growing mold in the building. This test will not detect inactive or dormant mold. Like TVOC, no federal or state agency has specified specific limits for TMVOC. Typically, if there is no plumbing leak or water intrusion into the building, there will not be a mold problem. If the presence of mold is indicated, the first step in fixing the problem is to find and eliminate the water source. Typical places to check are roof leaks, plumbing leaks, leaks under the windows, leaking appliances, and sweating fixtures.

For Normal Individuals:

TMVOC levels below 6 ng/L typically indicate that there is a minimal amount of actively growing mold present. Levels between 6 and 20 ng/L indicate a low level of mold is present and people sensitive to mold may be affected. Levels between 20 and 60 ng/L indicate that actively growing mold is present at a moderate level and building occupants will probably be affected. Levels above 60 ng/L indicate that a high level of mold is present and most building occupants will be affected.

For Hypersensitive Individuals:

TMVOC levels below 3 ng/L indicate very reduced levels of actively growing mold may be present which will typically not affect hypersensitive individuals. Levels between 3 and 10 ng/L indicate that actively growing mold is present that may affect hypersensitive individuals. Levels between 10 and 20 ng/L indicate that actively growing mold is present; and significant allergic reactions for hypersensitive individuals are possible. Levels above 20 ng/L indicate that significant, active mold growth is present that will probably affect most hypersensitive individuals.

The TMVOC ranges cited above and their interpretation are not absolute as many conditions affect the quantity of MVOCs detected. Therefore, it must be understood that these results are not definitive but are meant as a general guideline only.

Caution should always be exercised when removing mold and it is recommended that a professional mold remediator be consulted before any removal is initiated.

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