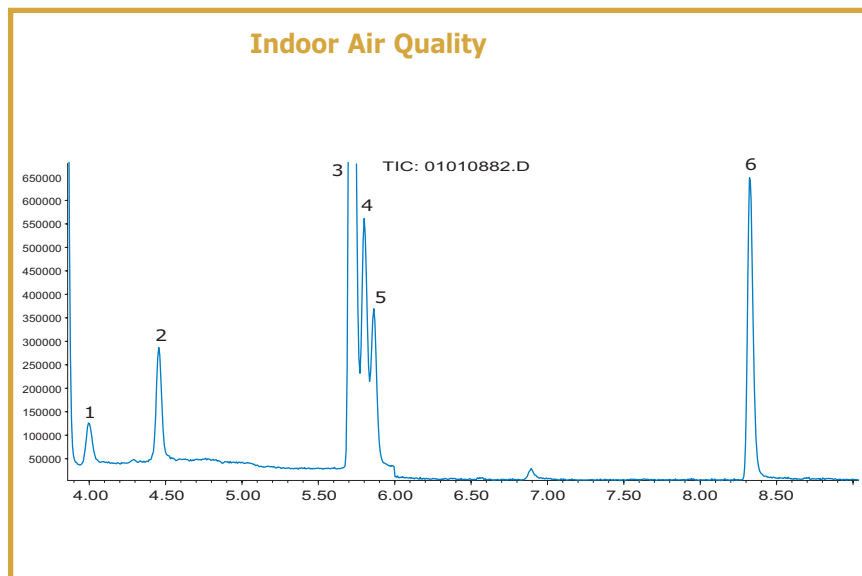


INDOOR AIR Quality & Mold Analysis

Indoor Air Quality

The list of compounds that can effect indoor air quality is extensive. The source and concentration of these compounds is seldom known. This makes conventional sampling media and sampling rate difficult to determine. Entech's canister approach solves these problems because sampling is always done the same way, regardless of the compounds or their concentration. Any compound that can be analyzed by GC can be sampled with the Entech MiniCan at the same detection limits achieved by thermal desorption.



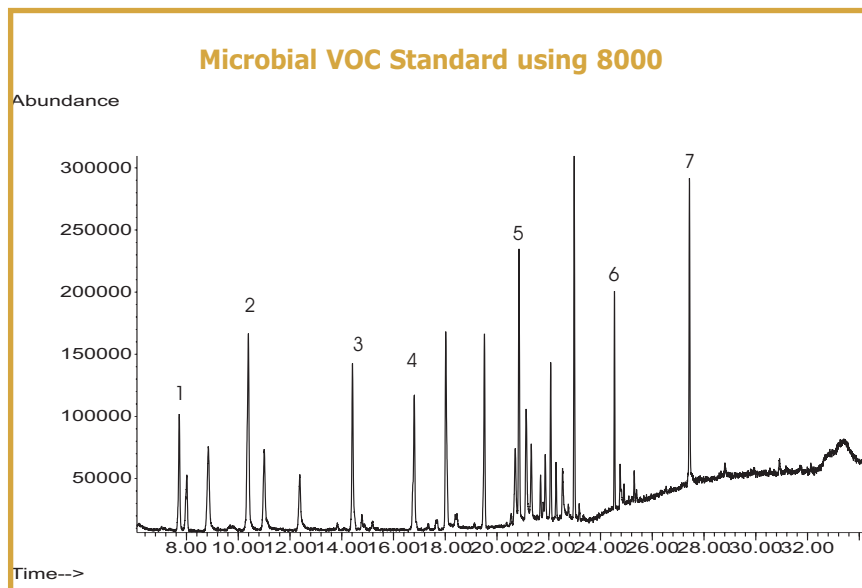
Inlet: 7100/7032
System Configurations: A, B, C, D
Sample Size: 100cc
Matrix Management: Coldtrap Dehydration
M1-Open, M2-Tenax
Column: HP1, 60m, 0.32mm ID, 1um film
Carrier: He, 1.5 ccm constant flow
Oven Temp: 35°C 5 min, 6°C/min to 150°C
15°C/min to 220°C, 4min hold
GCMS: HP 5973
MS Operation:
33-270 amu, 3.1Hz, EI, EM=0 Rel.

Tune: BFB
Compounds: Carbonyl Standard

1. Formaldehyde	50PPB	61 ng/l
2. Acetaldehyde	20 PPB	36 ng/l
3. Acetone-d6	100 PPB	261 ng/l
4. Acetone	20 PPB	47 ng/l
5. Propionaldehyde	20 PPB	47 ng/l
6. Methyl ethyl ketone (MEK - 2-Butanone)	20 PPB	59/ng/l

Mold Analysis

The presence of Microbial VOC's (MVOC's) in indoor air is one of the earliest signs of active mold growth. Spore counts will not indicate the early stages of mold growth as spores are not released during the active growth phase. A 5 second sample is all that is required. Even wall cavities can be sampled in seconds, without wall damage. Although not necessarily found at levels which would affect human health, the detection of MVOC's indicates active mold growth and in turn indicates hidden water leaks and potentially toxic mold growth before spores are released.



Inlet: 8000-LVSH
System Configurations: E, F
Sample Size: 100cc
Matrix Management: On Column
Column: HP1, 60m, 0.32mm ID, 1um film
Carrier: He, 1.5 ccm constant flow
Oven Temp: 35°C 3 min, 6°C/min to 120°C
10°C/min to 150°C, 25°C/min
to 250°C, 10min hold
GCMS: HP 5973
MS Operation:
33-270 amu, 3.1Hz, EI, EM=0 Rel.
Tune: BFB

Compounds:

1. 2-Methylfuran
2. 2-Pentanal
3. 2-Hexanone
4. Chlorobenzene-d5 (IS)
5. 3-Octanone
6. MIB-2
7. Geosmin