




FIELD SAMPLING TEST REPORT	
<b>Customer Information</b>	LST.FAI.HBDCResults@ul.com UL Verification Services, Inc. 3251 Old Lee Highway, Suite 100 Fairfax, VA 22030
<b>HB Project Number</b>	2010030NY
<b>Date Received</b>	October 22, 2020
<b>Testing Laboratory Location</b>	UL Environment - Marietta, 2211 Newmarket Parkway, Marietta, GA 30067-9399 USA
<b>Method</b>	USEPA Compendium Method TO-17 ; ASTM 6196
<b>Authorized by</b>	 Allyson M. McFry Chemistry Laboratory Director
<p>Sampling: Reported data were obtained from samples and sampling information as provided by the on-site investigator. These data and general information are provided to assist the investigator in an overall IAQ assessment. Interpretation of data is left to the client or persons who conducted the field work.</p> <p>This test is accredited and meets the requirements of ISO/IEC 17025 as verified by ANSI National Accreditation Board. Refer to certificate and scope of accreditation AT-1297.</p> <p>This report shall not be reproduced, except in full, without permission from UL. Results contained within this report only apply to the actual product tested under the testing conditions documented in this report.</p>	

Date Issued: November 11, 2020  
Product #: 1001053392-3408925  
Report #: 1001053392-3408925  
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UL ID:	SV1TFD
Sample Date:	October 20, 2020
Volume (L):	18.4

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		B08_LR_Hall_Pre	
Total Volatile Organic Compounds		206 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester (component of Texanol)	70.0	7.9
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	43.4	4.9
64-19-7	Acetic acid	11.9	4.8
66-25-1	Hexanal	11.9	2.9
91-20-3	Naphthalene†	8.2	1.6
124-19-6	Nonyl aldehyde (Nonanal) †	6.5	1.1
108-88-3	Toluene (Methylbenzene)	6.4	1.7
108-95-2	Phenol†	4.9	1.3
124-13-0	Octanal†	4.5	0.9
98-01-1	Furfural (2-Furaldehyde)	4.1	1.0
144-19-4	1,3-Pentanediol, 2,2,4-trimethyl	3.8	0.6
112-41-4	1-Dodecene	3.7	0.5
111-76-2	Ethanol, 2-butoxy	3.5	0.7
71-36-3	1-Butanol (N-Butyl alcohol)	3.5	1.1
104-76-7	1-Hexanol, 2-ethyl	3.4	0.6
71-41-0	1-Pentanol (N-Pentyl alcohol)	3.3	0.9
80-56-8	Pinene, alpha (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	3.2	0.6
110-62-3	Pentanal	3.1	0.9
142-96-1	n-Butyl ether	3.1	0.6
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-*	2.6	0.3
541-02-6	Cyclopentasiloxane, decamethyl	2.4	0.2
1000151-75-4	trans-3-Carene-2-ol*	2.2	0.4
140-67-0	Estragole (4-Allylanisole)	2.2	0.4
629-50-5	Tridecane	2.2	0.3
102-62-5	Glycerol 1,2-diacetate*	2.2	0.3
110-43-0	2-Heptanone	2.1	0.4
127-91-3	Pinene, beta (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)	2.1	0.4
123-86-4	Acetate, butyl	2.0	0.4
74367-31-0	Propanoic acid, 2-methyl-, 2-ethyl-3-hydroxyhexyl ester*	2.0	0.2

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UL ID:	SV1TFDF
Sample Date:	October 20, 2020
Volume (L):	18.0

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

<b>Sample Location/Description</b>		B08_LR_Hall_Field Blank	
<b>Total Volatile Organic Compounds</b>		BQL	
CAS Number	Compound	Concentration	
		µg/m <sup>3</sup>	ppb
287-92-3	Cyclopentane	8.4	2.9

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UL ID:	SV2TFD
Sample Date:	October 21, 2020
Volume (L):	18.5

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		B08_LR_Hall_Post	
Total Volatile Organic Compounds		41.4 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
100-42-5	Styrene†	18.0	4.2
64-19-7	Acetic acid	7.2	2.9
71-43-2	Benzene†	7.3	2.3
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	4.5	1.1
108-88-3	Toluene (Methylbenzene)	3.4	0.9
91-20-3	Naphthalene†	2.9	0.5
98-01-1	Furfural (2-Furaldehyde)	2.7	0.7
116-09-6	2-Propanone, 1-hydroxy	2.7	0.9
66-25-1	Hexanal	2.1	0.5

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TVOC (total volatile organic compounds) are calibrated relative to toluene.

Field Blanks: Reported concentrations based on 18.0 L of volume sampled for VOCs. Actual field blanks are not intended to have a measurable amount of air sampled.

†Denotes quantified using multipoint authentic standard curve. Other VOCs quantified relative to toluene.

Values below 2.0 µg/m<sup>3</sup> are for information purposes only. Chemical was detected, but below the quantifiable level of 0.04 µg based on a standard of 18 L air collection volume.

UL Environment's quality assurance program monitors blank sorbent media to ensure that the residual background does not exceed UL Environment's quality objective of ≤ 36 ng of total VOC.

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Project # 2010030NY B07

1001053392 - 3408925



## ACTIVE CHEMICAL SAMPLING CHAIN OF CUSTODY

Company: ULVS (Healthy Buildings)	Contact: CARERESULTS@UL.COM	Project/P.O./Job Number: 2010030NY_B08
Address: 3251 Old Lee Highway #100 Fairfax, VA 22030	Phone: 571.655.7919 Fax: 703.323.4440	Sample Date: 20-21OCT2020 Investigator: SAM.HORNER
Please check the appropriate fields; Use separate COC for each sample method.	VOLATILE ORGANICS: IVOC SCAN: <u>      </u> TOP 20 IVOC <u>      </u> TVOC ONLY <u>      </u> OTHER <u>      </u> B.T.E.X. <u>      </u>	
	ALDEHYDE SCAN: <u>      </u> FORMALDEHYDE ONLY <u>      </u> ANALYSIS: LEED V4 <u>      </u> LEED V4.1 <u>      </u> OTHER <u>      </u> B.T.E.X. <u>      </u>	
	TAT: Standard <u>  X  </u> Next Day Rush* <u>      </u> * Rush charges apply; please call in advance to confirm availability	

Comments:

UL ID	SAMPLE ID/ TUBE ID	SAMPLE LOCATION/ DESCRIPTION	START TIME	STOP TIME	TIME SAMPLED (MIN)	PUMP ID #	FLOW RATE (L/MIN)	VOLUME (L)
101	2010030NY-08A/ s/n B26502	B08_LR_Hall_Pre	20Oct 15:20	20Oct 16:20	60	4257	0.306	18.38L
102	2010030NY-08B/ s/n B27012	B08_LR_Hall_Post	21Oct 12:18	21Oct 13:18	60	4257	0.308	18.45L
101F	2010030NY-08C/ s/n B26611	B08_LR_Hall_Field Blank						n/a 18

**3408925**  
  
 Description: 2010030NYB08  
 3408925

Released By: SAM.HORNER (Print/Sign) <i>[Signature]</i>	Date/Time: 21OCT2020	Method of Shipment: UPS Next Day
Received By: <i>[Signature]</i>	Date/Time: 10/22/20 10:40 AM	Sample Condition: Acceptable

Customer: UL Environment Inc.  
 Received Date: 2020-OCT-22 12:37:38 PM  
 Aurora Project No.: 1001053392  
 Order No.:  
 Oracle Project No.: