

FIELD SAMPLING TEST REPORT					
Customer Information	LST.FAI.HBDCResults@ul.com UL Verification Services, Inc. 3251 Old Lee Highway, Suite 100 Fairfax, VA 22030				
HB Project Number	2010030NY				
Date Received	October 21, 2020				
Testing Laboratory Location	UL Environment - Marietta, 2211 Newmarket Parkway, Marietta, GA 30067-9399 USA				
Method	USEPA Compendium Method TO-17 ; ASTM 6196				
Authorized by	Allyson M. McFry Chemistry Laboratory Director				

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.

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.

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Date Issued: Product #: Report #: ©2020 UL LLC

UL ID:	SV1TFD
Sample Date:	October 20, 2020
Volume (L):	18.5

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description	B07_BR_04_Pre
Total Volatile Organic Compounds	222 μg/m³

CAS	Compound	Concentration		
Number	Compound	μg/m³	ppb	
541-02-6	Cyclopentasiloxane, decamethyl	80.1	5.3	
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4- trimethylpentyl ester (component of Texanol)	43.7	4.9	
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	25.3	2.9	
64-19-7	Acetic acid	18.9	7.7	
66-25-1	Hexanal	14.1	3.4	
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-*	11.2	1.5	
108-88-3	Toluene (Methylbenzene)	5.4	1.4	
110-62-3	Pentanal	4.8	1.4	
71-41-0	1-Pentanol (N-Pentyl alcohol)	4.2	1.2	
124-19-6	Nonyl aldehyde (Nonanal) †	3.8	0.7	
25265-71-8	Dipropylene Glycol	3.7	0.7	
275-51-4	Azulene*	3.6	0.7	
124-13-0	Octanal <sup>†</sup>	3.5	0.7	
624-54-4	Propanoic acid, pentyl ester*	3.4	0.6	
80-56-8	Pinene, alpha (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	3.3	0.6	
142-96-1	n-Butyl ether	3.0	0.6	
127-91-3	Pinene, beta (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)	2.7	0.5	
98-01-1	Furfural (2-Furaldehyde)	2.3	0.6	
57-55-6	1,2-Propanediol (Propylene glycol)	2.2	0.7	
104-76-7	1-Hexanol, 2-ethyl	2.2	0.4	
29621-55-4	1-Cyclohexene-1-methanol, 4-(1-methylethenyl)-, formate*	2.0	0.3	

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

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		B07_BR_04Field Blank		
Total Volatile Organic Compounds		BQL		
CAS		Concentration		ntration
Number	Compound		μg/m³	ppb

UL ID:	SV2TFD
Sample Date:	October 20, 2020
Volume (L):	18.6

## CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description	B07_BR_04_Post
Total Volatile Organic Compounds	141 μg/m³

CAS	Compound	Concentration		
Number	Compound	μg/m³	ppb	
100-42-5	Styrene <sup>†</sup>	40.4	9.5	
71-43-2	Benzene <sup>†</sup>	25.8	8.1	
64-19-7	Acetic acid	11.7	4.8	
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	10.8	2.6	
91-20-3	Naphthalene <sup>†</sup>	9.6	1.8	
98-01-1	Furfural (2-Furaldehyde)	9.4	2.4	
108-88-3	Toluene (Methylbenzene)	7.4	2.0	
108-95-2	Phenol <sup>†</sup>	6.8	1.8	
66-25-1	Hexanal	4.4	1.1	
116-09-6	2-Propanone, 1-hydroxy	3.6	1.2	
120-92-3	Cyclopentanone	3.6	1.0	
98-83-9	a-Methylstyrene (iso-Propenylbenzene; (1- Methylethenyl)benzene)	3.5	0.7	
100-41-4	Benzene, ethyl <sup>†</sup>	2.9	0.7	
141-32-2	Butyl acrylate (2-Propenoic Acid, butyl ester)	2.9	0.5	
90-05-1	Phenol, 2-methoxy*	2.4	0.5	
100-52-7	Benzaldehyde	2.4	0.5	
106-44-5	Phenol, 4-methyl (p-Cresol)*	2.3	0.5	
95-13-6	Indene*	2.2	0.5	
1330-20-7	Xylenes (Total) †	2.1	0.5	
110-86-1	Pyridine	2.1	0.6	
565-69-5	3-Pentanone, 2-methyl*	2.0	0.5	
80-56-8	Pinene, alpha (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	2.0	0.4	
71-36-3	1-Butanol (N-Butyl alcohol)	2.0	0.6	

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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.

<sup>†</sup>Denotes quantified using multipoint authentic standard curve. Other VOCs quantified relative to toluene.

Values below 2.0  $\mu$ g/m³ are for information purposes only. Chemical was detected, but below the quantifiable level of 0.04  $\mu$ g 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  $\leq$  36 ng of total VOC.

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Project #\_2010030NY\_B07

## 1001053392-3405494



			TIVE CHEMICA	L SAMPLI	NG CHAIN OF	CUSTO	DY				
Company: ULVS (Healthy Buildings)			Contact: CARESULTS@UL.COM				Project/P.O./Job Number: 2010030NY B07				
	51 Old Lee High	way #100	Phone: 571.65	5.7919			Sample Date:		20OCT	20OCT2020	
Fairfax, VA 22030		Fax: 703.32	23.4440			Inves	tigator:	SAM.H	ORNER		
Please check	the VOLATILE C	RGANICS: IVOC	SCAN: TO	SCAN: TOP 20 IVOC TVOC ONLY OTI			THER_	B.T.E.X.			
Use separate C	OC ALDEHYDE	SCAN: FO	ORMALDEHYDE ONLY ANALYSIS: LEED V4			LEED V4.1 OTHER _B.T.E.X.					
method.	TAT: Standa	rd X Next D	ay Rush* * R	ush charges	apply; please call in	advance	to confi	rm availability			
Comments:											
UL ID	)		LOCATION/ RIPTION	START TIME	STOP TIME	TIMI SAMPI (MIN	ED	PUMP ID	FLOW RATE (L/MIN)	VOLUME (L)	
Vol	2010030NY-07A/ s/n B26483	B07_BR_04_	Pre	08:22	09:22	60		4257	0.309	18.51L	
Vo2	2010030NY-07B/ s/n B27025	B07_BR_04_	Post	11:20	12:20	60		4257	0.31	18.59L	
VOIF	2010030NY-07C/ s/n B26484	B07_BR_04F	Field Blank							n/a	
						244	25.44				
Released By: SAM.HORNER Date/Time: 200CT2020 (Print/Sign)		Γ2020	Method of Shipment: UPS Next Da		Descri	405494 3405494					
Received By:	Borton	Date/Time: 10/21/20	10.30 AM	Sample Con	dition	Customer: UL Environment Inc.  Received Date: Aurora Project No.: 100 2020-0CT-21 11:36:22 AM Oracle Project No.:		lo.: 1001053392			

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