



**QualiTest® Diagnostics**

7030 Ryburn Dr. Millington, TN

Phone: (901) 873-5300

Fax: (901) 873-5301

[www.gohispeed.com](http://www.gohispeed.com)

July 12, 2021

Harold Green  
St. Jude Research Hospital  
Memphis, TN

The following is a summary of findings from the 2021 annual AHU vibration survey at TRB (old) and TRB (new) buildings.

**QualiTest®** uses a four step rating system for defects.

**Class I:** Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

**Class II:** Defect (s) present that may cause problem in long term (2-6 months). Repair during normal maintenance scheduling. Continue to monitor.

**Class III:** Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

**Class IV:** Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

**Hi-Speed Industrial Service** tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

### TRB (old)

#### AHU 1-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 2-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 3-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 4-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 5-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 6-1

All vibration data is within acceptable limits. No action recommended at this time.

### TRB (new)

#### AHU 1-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 2-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 3-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 4-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 5-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 6-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 7-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 8-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU 9-1

All vibration data is within acceptable limits. No action recommended at this time.

#### AHU10-1

All vibration data is within acceptable limits. No action recommended at this time.

Abbreviated Last Measurement Summary

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Database: stjude~1.rbm  
 Station: TRB

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
AHU 1-1 - AHU 1-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.108 In/Sec	.307 G-s
BIH	.117 In/Sec	.287 G-s
AHU 2-1 - AHU 2-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.060 In/Sec	.218 G-s
BIH	.128 In/Sec	.186 G-s
AHU 3-1 - AHU 3-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.074 In/Sec	.360 G-s
BIH	.051 In/Sec	.202 G-s
AHU 4-1 - AHU 4-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.069 In/Sec	.224 G-s
BIH	.082 In/Sec	.181 G-s
AHU 5-1 - AHU 5-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.124 In/Sec	.182 G-s
BIH	.062 In/Sec	.268 G-s
AHU 6-1 - AHU 6-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.053 In/Sec	.271 G-s
BIH	.045 In/Sec	.306 G-s

Database: stjude~1.rbm  
 Station: TRB NEW

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
AHU 1-2 - AHU 1-2		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.086 In/Sec	.432 G-s
BIH	.041 In/Sec	.338 G-s
AHU 2-1 - AHU 2-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.040 In/Sec	.356 G-s
BIH	.075 In/Sec	.345 G-s
AHU 3-1 - AHU 3-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.081 In/Sec	.405 G-s
BIH	.090 In/Sec	.405 G-s
AHU 4-1 - AHU 4-1		(08-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
AIH	.075 In/Sec	.576 G-s
BIH	.042 In/Sec	.265 G-s

AHU 5-1	- AHU 5-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.047 In/Sec	.364 G-s
BIH		.093 In/Sec	.516 G-s
AHU 6-1	- AHU 6-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.068 In/Sec	.422 G-s
BIH		.072 In/Sec	.566 G-s
AHU 7-1	- AHU 7-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.089 In/Sec	.790 G-s
BIH		.062 In/Sec	.650 G-s
AHU 8-1	- AHU 8-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.080 In/Sec	.501 G-s
BIH		.115 In/Sec	.359 G-s
AHU 9-1	- AHU 9-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.029 In/Sec	.322 G-s
BIH		.044 In/Sec	.244 G-s
AHU 10-1	- AHU 10-1		(08-Jul-21)
		OVERALL LEVEL	1 - 20 KHz
AIH		.097 In/Sec	.519 G-s
BIH		.108 In/Sec	.376 G-s

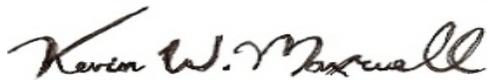
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Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK

As always, it has been a pleasure to serve St. Jude Research Hospital. If there are any comments or questions, do not hesitate to contact us.

Sincerely,



ISO Certified Vibration Analyst, Category III



**QualiTest<sup>®</sup> Diagnostics**

Cell: 901-486-4565

Email: [kwilliam@gohispeed.com](mailto:kwilliam@gohispeed.com)