



**QualiTest® Diagnostics**

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July 12, 2021

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St Jude Research Hospital  
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The following is a summary of findings from the annual AHU vibration survey at the DTRC building. Please let us know if there are any questions or comments.

**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.

## **DTRC Building Air Handlers**

### **AHU 1A SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1A SF-2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1A SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1A SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1B SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1B SF-2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1B SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 1B SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2A SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2A SF 2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2A SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2A SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2B SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2B SF-2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2B SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 2B SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

### **AHU 3A SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3A SF-2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3A SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3A SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3B SF-1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3B SF-2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3B SF-3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 3B SF-4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4A SF 1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4A SF 2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4A SF 3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4A SF 4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4B SF 1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4B SF 2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4B SF 3**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 4B SF 4**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 5 SF 1**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

**AHU 5 SF 2**

Measured vibration data is all within acceptable limits. No work is recommended at this time.

Abbreviated Last Measurement Summary

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Database: stjude~1.rbm

Station: DTRC AHU

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
SF1A-1 - AHU 1A-1	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.033 In/Sec	.612 G-s
MOV	.029 In/Sec	.580 G-s
MIH	.021 In/Sec	.666 G-s
MIV	.037 In/Sec	.501 G-s
MIA	.030 In/Sec	.508 G-s
SF1A-2 - AHU 1A-2	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.035 In/Sec	.953 G-s
MOV	.033 In/Sec	.676 G-s
MIH	.029 In/Sec	.759 G-s
MIV	.035 In/Sec	.756 G-s
MIA	.026 In/Sec	.235 G-s
SF1A-3 - AHU 1A-3	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.034 In/Sec	.554 G-s
MOV	.053 In/Sec	.560 G-s
MIH	.029 In/Sec	.521 G-s
MIV	.069 In/Sec	.189 G-s
MIA	.072 In/Sec	.466 G-s
SF1A-4 - AHU 1A-4	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.029 In/Sec	.460 G-s
MOV	.056 In/Sec	.379 G-s
MIH	.029 In/Sec	.494 G-s
MIV	.035 In/Sec	.460 G-s
MIA	.027 In/Sec	.628 G-s
SF1B-1 - AHU 1B-1	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.034 In/Sec	.602 G-s
MOV	.069 In/Sec	.441 G-s
MIH	.032 In/Sec	.321 G-s
MIV	.042 In/Sec	.366 G-s
MIA	.026 In/Sec	.390 G-s
SF1B-2 - AHU 1B-2	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.038 In/Sec	.661 G-s
MOV	.024 In/Sec	.424 G-s
MIH	.030 In/Sec	.675 G-s
MIV	.027 In/Sec	.667 G-s
MIA	.045 In/Sec	.287 G-s
SF1B-3 - AHU 1B-3	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.024 In/Sec	.373 G-s
MOV	.104 In/Sec	.752 G-s
MIH	.028 In/Sec	.243 G-s
MIV	.042 In/Sec	.205 G-s
MIA	.046 In/Sec	.582 G-s

SF1B-4	- AHU 1B-4	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.020 In/Sec	.501 G-s
MOV	.030 In/Sec	.461 G-s
MIH	.042 In/Sec	.652 G-s
MIV	.037 In/Sec	.651 G-s
MIA	.041 In/Sec	.575 G-s
SF2A-1	- AHU 2A-1	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.028 In/Sec	.635 G-s
MOV	.031 In/Sec	.554 G-s
MIH	.023 In/Sec	.729 G-s
MIV	.031 In/Sec	.658 G-s
MIA	.043 In/Sec	.293 G-s
SF2A-2	- AHU 2A-2	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.024 In/Sec	.393 G-s
MOV	.027 In/Sec	.561 G-s
MIH	.022 In/Sec	.471 G-s
MIV	.020 In/Sec	.377 G-s
MIA	.048 In/Sec	.335 G-s
SF2A-3	- AHU 2A-3	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.032 In/Sec	.587 G-s
MOV	.039 In/Sec	.591 G-s
MIH	.038 In/Sec	.548 G-s
MIV	.046 In/Sec	.288 G-s
MIA	.043 In/Sec	.303 G-s
SF2A-4	- AHU 2A-4	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.038 In/Sec	.509 G-s
MOV	.028 In/Sec	.554 G-s
MIH	.036 In/Sec	.614 G-s
MIV	.032 In/Sec	.383 G-s
MIA	.040 In/Sec	.129 G-s
SF2B-1	- AHU 2B-1	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.033 In/Sec	.436 G-s
MOV	.040 In/Sec	.425 G-s
MIH	.025 In/Sec	.352 G-s
MIV	.034 In/Sec	.512 G-s
MIA	.038 In/Sec	.364 G-s
SF2B-2	- AHU 2B-2	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.030 In/Sec	.479 G-s
MOV	.030 In/Sec	.844 G-s
MIH	.026 In/Sec	.632 G-s
MIV	.035 In/Sec	.603 G-s
MIA	.058 In/Sec	.504 G-s
SF2B-3	- AHU 2B-3	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.043 In/Sec	.584 G-s
MOV	.061 In/Sec	.901 G-s
MIH	.027 In/Sec	.289 G-s
MIV	.029 In/Sec	.355 G-s
MIA	.037 In/Sec	.408 G-s
SF2B-4	- AHU 2B-4	(07-Jul-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.036 In/Sec	.361 G-s
MOV	.024 In/Sec	.571 G-s
MIH	.035 In/Sec	.384 G-s
MIV	.034 In/Sec	.530 G-s

MIA	.045 In/Sec	.610 G-s
SF3A-1 - AHU 3A-1	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.033 In/Sec	.506 G-s
MOV	.041 In/Sec	.800 G-s
MIH	.029 In/Sec	1.010 G-s
MIV	.050 In/Sec	.361 G-s
MIA	.038 In/Sec	.399 G-s
SF3A-2 - AHU 3A-2	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.032 In/Sec	.659 G-s
MOV	.047 In/Sec	.505 G-s
MIH	.039 In/Sec	.683 G-s
MIV	.030 In/Sec	.628 G-s
MIA	.039 In/Sec	.559 G-s
SF3A-3 - AHU 3A-3	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.046 In/Sec	.559 G-s
MOV	.029 In/Sec	.526 G-s
MIH	.033 In/Sec	.245 G-s
MIV	.023 In/Sec	.515 G-s
MIA	.043 In/Sec	.937 G-s
SF3A-4 - AHU 3A-4	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.038 In/Sec	.488 G-s
MOV	.042 In/Sec	.770 G-s
MIH	.045 In/Sec	.624 G-s
MIV	.042 In/Sec	.990 G-s
MIA	.040 In/Sec	.834 G-s
SF3B-1 - AHU 3B-1	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.024 In/Sec	.598 G-s
MOV	.026 In/Sec	.505 G-s
MIH	.027 In/Sec	.722 G-s
MIV	.028 In/Sec	.563 G-s
MIA	.026 In/Sec	.522 G-s
SF3B-2 - AHU 3B-2	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.069 In/Sec	.351 G-s
MOV	.034 In/Sec	.558 G-s
MIH	.023 In/Sec	.266 G-s
MIV	.034 In/Sec	.682 G-s
MIA	.049 In/Sec	.721 G-s
SF3B-3 - AHU 3B-3	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.027 In/Sec	.469 G-s
MOV	.031 In/Sec	.381 G-s
MIH	.025 In/Sec	.587 G-s
MIV	.044 In/Sec	.749 G-s
MIA	.023 In/Sec	.311 G-s
SF3B-4 - AHU 3B-4	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.022 In/Sec	.632 G-s
MOV	.029 In/Sec	.447 G-s
MIH	.028 In/Sec	.310 G-s
MIV	.028 In/Sec	.644 G-s
MIA	.031 In/Sec	.656 G-s
SF4A-1 - AHU 4A-1	(07-Jul-21)	
OVERALL LEVEL	1 - 20 KHz	
MOH	.020 In/Sec	.465 G-s
MOV	.038 In/Sec	.392 G-s

	MIH	.020 In/Sec	.368 G-s
	MIV	.023 In/Sec	.410 G-s
	MIA	.026 In/Sec	.498 G-s
SF4A-2	- AHU 4A-2	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.023 In/Sec	.247 G-s
	MOV	.035 In/Sec	.512 G-s
	MIH	.028 In/Sec	.487 G-s
	MIV	.023 In/Sec	.651 G-s
	MIA	.029 In/Sec	.681 G-s
SF4A-3	- AHU 4A-3	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.038 In/Sec	.440 G-s
	MOV	.024 In/Sec	.495 G-s
	MIH	.032 In/Sec	.322 G-s
	MIV	.032 In/Sec	.239 G-s
	MIA	.048 In/Sec	.508 G-s
SF4A-4	- AHU 4A-4	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.043 In/Sec	.557 G-s
	MOV	.037 In/Sec	1.007 G-s
	MIH	.036 In/Sec	.372 G-s
	MIV	.055 In/Sec	.511 G-s
	MIA	.043 In/Sec	.386 G-s
SF4B-1	- AHU 4B-1	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.032 In/Sec	.493 G-s
	MOV	.033 In/Sec	.501 G-s
	MIH	.027 In/Sec	.567 G-s
	MIV	.029 In/Sec	.641 G-s
	MIA	.024 In/Sec	.399 G-s
SF4B-2	- AHU 4B-2	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.034 In/Sec	.429 G-s
	MOV	.034 In/Sec	.607 G-s
	MIH	.025 In/Sec	.516 G-s
	MIV	.033 In/Sec	.631 G-s
	MIA	.042 In/Sec	.495 G-s
SF4B-3	- AHU 4B-3	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.030 In/Sec	.395 G-s
	MOV	.029 In/Sec	.444 G-s
	MIH	.022 In/Sec	.586 G-s
	MIV	.026 In/Sec	.399 G-s
	MIA	.035 In/Sec	.602 G-s
SF4B-4	- AHU 4B-4	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.035 In/Sec	.391 G-s
	MOV	.034 In/Sec	.568 G-s
	MIH	.033 In/Sec	.504 G-s
	MIV	.035 In/Sec	.517 G-s
	MIA	.049 In/Sec	.660 G-s
SF5-1	- AHU 5-1	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	
	MOH	.063 In/Sec	.568 G-s
	MOV	.087 In/Sec	.532 G-s
	MIH	.063 In/Sec	.719 G-s
	MIV	.081 In/Sec	.817 G-s
	MIA	.078 In/Sec	.252 G-s
SF5-2	- AHU 5-2	(07-Jul-21)	
	OVERALL LEVEL	1 - 20 KHz	

MOH	.118 In/Sec	.334 G-s
MIH	.093 In/Sec	.493 G-s
MIA	.072 In/Sec	.361 G-s

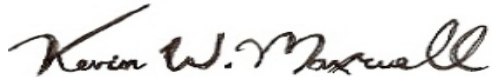
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Clarification Of Vibration Units:

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



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