



QualiTest® Diagnostics

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December 13, 2021

St. Jude Research Hospital
Memphis, TN

The following is a summary of findings from the semi-annual ALSAC AHU vibration survey.

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.

ALSAC TOWERS

AHU 3

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

AHU 4

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

AHU 5

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

AHU 6

Unit could not be accessed during this survey.

AHU 6 RFA

Unit could not be accessed during this survey.

AHU 6 RFB

Unit could not be accessed during this survey.

AHU 13

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

AHU 14

Motor data indicates motor bearing wear and sheave issue such as sheave wear/misalignment. It is recommended to inspect the motor and fan sheave for wear and misalignment. Motor may need to be replaced in the next few months. Rated as a **CLASS II** defect.

AHU 15

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

AHU 16

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

AHU 17

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

Abbreviated Last Measurement Summary

Database: stjude~1.rbm
Station: ALSAC TOWERS

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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AHU 3 - AHU 3 29743		(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.126 In/Sec	.261 G-s
MIH	.117 In/Sec	.496 G-s
MIA	.104 In/Sec	.222 G-s

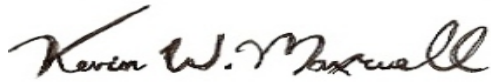
AHU 4	- AHU 4 29744	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.230 In/Sec	.214 G-s
MIH	.287 In/Sec	.346 G-s
MIA	.135 In/Sec	.524 G-s
AHU 5	- AHU 5 29745	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.075 In/Sec	.215 G-s
MIH	.120 In/Sec	.461 G-s
MIA	.128 In/Sec	.070 G-s
AHU 7	- AHU 7	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.105 In/Sec	.297 G-s
MIH	.134 In/Sec	.476 G-s
MIA	.164 In/Sec	.529 G-s
FIH	.235 In/Sec	.297 G-s
FOH	.145 In/Sec	.368 G-s
AHU 13	- AHU 13 7374	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.123 In/Sec	.177 G-s
MIH	.136 In/Sec	.163 G-s
MIA	.136 In/Sec	.170 G-s
FIH	.138 In/Sec	.511 G-s
AHU 14	- AHU 14 7375	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.206 In/Sec	.882 G-s
MIH	.249 In/Sec	1.431 G-s
MIA	.372 In/Sec	.582 G-s
FIH	.212 In/Sec	.093 G-s
AHU 15	- AHU 15 7376	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.170 In/Sec	.326 G-s
MIH	.142 In/Sec	.947 G-s
MIA	.130 In/Sec	.514 G-s
FIH	.150 In/Sec	.058 G-s
AHU 16	- AHU 16 7377	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.177 In/Sec	.682 G-s
MIH	.193 In/Sec	.917 G-s
MIA	.183 In/Sec	.759 G-s
FIH	.169 In/Sec	.120 G-s
AHU 17	- AHU 17 7378	(10-Dec-21)
	OVERALL LEVEL	1 - 20 KHz
MOH	.273 In/Sec	.283 G-s
MIH	.247 In/Sec	.325 G-s
MIA	.140 In/Sec	.433 G-s
FOH	.244 In/Sec	.440 G-s

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,

A handwritten signature in black ink that reads "Kevin W. Maxwell". The signature is fluid and cursive, with the first name "Kevin" and last name "Maxwell" clearly legible.

ISO Certified Vibration Analyst, Category III



QualiTest® Diagnostics

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