

7030 Ryburn Dr. Millington, TN Phone: (901) 873-5300 Fax: (901) 873-5301 <u>www.gohispeed.com</u>

August 10, 2020

St. Jude Research Hospital Memphis, TN

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

QualiTest® uses a four step rating system for defects.

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

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

<u>Class III:</u> 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.

<u>Class IV</u>; 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

Chili's Building

AHU P SF

Data of the motor is suggesting bearing issues along with some electrical vibrations. This has likely led to electrical fluting of the motor bearings. Motor should be inspected as time allows. Rated as a **CLASS II** defect.

AHU P RF

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

AHU 1 SF

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

AHU 1 RF

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

AHU 2 SF

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

AHU 2 RF

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

AHU 3 SF

Data of the motor is suggesting bearing issues along with some electrical vibrations. This has likely led to electrical fluting of the motor bearings. Motor should be inspected as time allows. Rated as a **CLASS II** defect.

AHU 3 RF

Motor data indicates significant high frequency vibration which appears to be caused by electrical fluting of the motor bearings. Motor will need to be swapped out likely before next survey. Rated as a **CLASS II** defect.

AHU 4 SF

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

AHU 4 RF

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

AHU 5 SF

Data of the motor continues to show some signs of defects in the motor bearings. Bearings felt rough wile motor coasted down during our testing as well. It may be necessary to schedule a time to change out this motor in the near future. Rated as a **CLASS III** defect.

AHU 5 RF

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

AHU 6 SF

Data of the motor is suggesting bearing issues along with some electrical vibrations. This has likely led to electrical fluting of the motor bearings. Motor should be inspected as time allows. Rated as a **CLASS II** defect.

AHU 6 RF

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

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



Kevin W. Mozewell

QualiTest_® Diagnostics

Cell: 901-486-4565

Email: kwilliam@gohispeed.com