HI-SPEED INDUSTRIAL SERVICE QualiTest® Diagnostics

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St Jude Research Hospital
Memphis TN

The following is a summary of findings from the semi-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

DTRC Building Air Handlers

AHU 3
Vibration data of the fan bearings are showing defects are present in the bearings. Bearings need to be replaced in the near future. Rated as **CLASS II** defect.

AHU 4-1
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 4-2
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 4-3
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 4-4
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 6
Motor appears to have some electrical vibrations most likely related to the VFD. Bearings are also showing signs of wear. We will monitor this closely. Rated as a **CLASS II** defect.

AHU 7
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 8A
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 8B
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 10
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 11
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 12
Motor bearings appears to be defective especially the drive end motor bearing. Motor will need attention in the near future. Rated as a **CLASS II** defect.

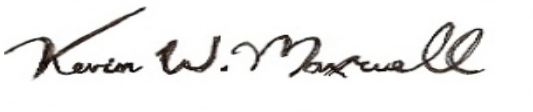
AHU 13
A high 1 x rpm vibration remains at the outboard bearing. Ensure all fasteners are tight and check shaft for run-out. If all looks good, then the fan wheel may have imbalance. Motor bearings are also showing signs of defects/wear. Rated as a **CLASS II** defect.

AHU 14
Measured vibration data is all within acceptable limits. No work is recommended at this time.

AHU 15
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

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