



**QualiTest® Diagnostics**

7030 Ryburn Dr. Millington, TN

Phone: (901) 873-5300

Fax: (901) 873-5301

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

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CGMP

St. Jude Children's Research Hospital

The following is a summary of findings from the semi-annual vibration survey at the CGMP 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.

## **CGMP BUILDING**

### **EF2 A**

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

### **EF2 B**

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

### **EF2 C**

Motor outboard (top) bearing data is showing an increase in what appears to be 1 x rpm vibration. This may be due to imbalance of the fan wheel. Inspect fan wheel for build-up and or damage soon. Fan wheel may need to be trim balanced in the near future. Rated as a **CLASS II** defect.

### **EF3 A**

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

### **EF3 B**

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

### **EF4 A**

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

### **EF4 B**

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

### **EF4 C**

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

### **EF5 A**

Motor outboard (top) bearing data is showing an increase in what appears to be 1 x rpm vibration. This may be due to imbalance of the fan wheel. Inspect fan wheel for build-up and or damage soon. Fan wheel may need to be trim balanced in the near future. Rated as a **CLASS II** defect.

### **EF5 B**

Overall vibration is slightly lower than 5A; however, motor outboard (top) bearing data is showing an increase in what appears to be 1 x rpm vibration. This may be due to imbalance of the fan wheel. Inspect fan wheel for build-up and or damage as time allows. Fan wheel may need to be trim balanced. Rated as a **CLASS I** defect.

### **RF1 A**

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

### **RF1 B**

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

### **RF6**

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

### **SF1 A**

Data shows possible defects in the motor bearings that be due to electrical fluting. Inspect motor as scheduling allows. Rated as a **CLASS II** defect.

**SF1 B**

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

**SF2 A**

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

**SF2 B**

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

**SF3 A**

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

**SF3 B**

Overall high frequency vibration has increased this survey. Data shows possible defects in the motor bearings that may be due to electrical fluting. Motor needs attention soon. Rated as a **CLASS III** defect.

**SF4 A**

Data shows possible defects in the motor bearings that be due to electrical fluting. Inspect motor as scheduling allows. Rated as a **CLASS II** defect.

**SF4 B**

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

**SF5 A**

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

**SF5 B**

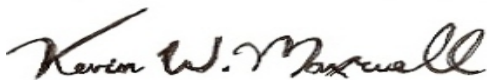
All measured vibration data is within acceptable limits. No action required at this time.

**SF6**

All measured vibration data is within acceptable limits. No action required 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



**QualiTest® Diagnostics**

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

901-486-4565

