

July 17, 2021

IFF

Subject: June MSP MS2P 800 and utilities area vibration report

Most of the machines surveyed were found to be in good condition with the exception of the following:

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

*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.

This completes our assessment of your equipment for this survey. Thank you for your business and feel free to call if you have any comments or questions.

Sincerely,

David W Shook David W. Shook

Senior Reliability Specialists *Hi-Speed* Industrial Service dshook@gohispeed.com

> 7030 Ryburn Drive Millington, TN 38053 P. 901-873-5300 F. 901-873-5301

# 800 T GRINDING

## 15-3043 N GRIND MILL RECEIVER ASP FAN

Vibration data shows an elevated fan speed vibration in the motor and fan. Inspect the unit for loose fasteners, structural defects, sheave alignment, belt tension, and build up or damage on the fan wheel. Trim balancing might be needed. **Rated a Class II Defect.** 

# 15-3048 S GRIND MILL RECEIVER ASP FAN

Vibration data shows an elevated fan speed vibration in the motor and fan. Fan bearing data also shows possible blade pass and slight looseness. Inspect the unit for loose fasteners, structural defects, sheave alignment, belt tension, and build up or damage on the fan wheel. Check for proper air flow parameters. Trim balancing might be needed. **Rated a Class II Defect.** 

# 14-3043 N DUST COLLECTOR ASP FAN #1

Elevated possible sub-synchronous vibration in the motor. Inspect for belt or drive train issues. Check all fasteners and structures as time allows. **Rated a Class II Defect.** 

## 14-3008 GRINDER SURGE BIN ASP FAN

Fan inboard bearing shows a dominant fan speed axial vibration. Inspect and clean the fan wheel, and check the drive train components for alignment, run out and wear. As always, check for loose fasteners and structural defects. **Rated a Class II Defect.** 

#### 14-3034 GROUND FLAKE TRANSFER BLOWER

Apparent shaft speed vibration in the motor. Inspect the drive train and all fasteners. Rated a Class I Defect.

#### 22-2040 TRACK 5 BLOWER

Slight increase in blower harmonic data. Rated a Class I Defect.

#### 22-0614 S FLAKE BLOWER @ TRACK #1

Motor has 1x RPM vibration. Inspect all fasteners and structures, and drive train for alignment and worn components. **Rated a Class I Defect.** 

#### 22-0604 N FLAKE BLOWER @ TRACK 1

Vibration data for the spindle and blower show elevated vibrations at 1x and 2x RPM. Inspect the drive train for alignment and worn components. As always check all fasteners and structures. **Rated a Class II Defect.** 

# SOUTH PLANT UTILITIES

## 15-4112 MS2P #2 UT COOL TOWER W PUMP

Motor has elevated 1x RPM vibration. Inspect the motor drivetrain for wear and alignment. Check the motor cooling fan. As always, check the fasteners and structures. **Rated a Class II Defect.** 

## 15-4162 E CHILLED WATER SUPPLY PUMP

Motor vibration data shows an elevated 1x, 2x and 3x RPM vibrations. Inspect the drive train for wear and alignment. Check the structure and fasteners. **Rated a Class II Defect.** 

# 15-4161 CENTER CHILLED WATER SUPPLY PUMP

Motor vibration data shows an elevated 1x and 2x RPM vibrations. Inspect the drive train for wear and alignment. Check the structure and fasteners. **Rated a Class III Defect.** 

## 14-4161 #2CHILL WATER SUPPLY PUMP S-B

Motor vibration data shows an elevated 1x and 2x RPM vibrations. Inspect the drive train for wear and alignment. Check the motor fan, structure, and fasteners. **Rated a Class II Defect.** 

## 14-4160 MSP #3 CHILL WATER SUPPLY PUMP

Motor shows strong 1x and 2x RPM vibrations. A 3x RPM vibration is also present in the axial. . Inspect the drive train for wear and alignment. Check the structure and fasteners. **Rated a Class III Defect.**