

August 2, 2021

**IFF** 

Subject: July 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

#### **800 T GRINDING**

Need July data to start

#### 15-3043 N GRIND MILL RECEIVER ASP FAN

Vibration data shows an increase fan speed vibration in the motor and fan. Motor is higher. 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 III Defect.** 

## 15-3048 S GRIND MILL RECEIVER ASP FAN

Vibration data shows an elevated fan speed vibration in the motor and fan. Fan vibrations are worse. 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 balance the fan. **Rated a Class III 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.** 

## 14-3016 MSP N FLAKE GRINDING MILL

Motor and fan speed vibrations in multiple points. Inspect the unit for wear and alignment in the drive train components. Rated a Class II Defect.

## 14-1329 MSP SFLAKE GRINDING MILL

Slight increase in motor speed vibrations. Inspect for drive train wear and alignment. **Rated a Class I 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.** 

#### 22-5032 E 800T BIN TRANS DIS BLOWER

Apparent blower harmonic vibrations in the motor. Please confirm shaft speeds to help identify issues. Inspect the unit fasteners and drive train components for defects and alignment. **Rated a Class II 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 motor, 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**

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

Motor still 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.

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

Motor vibration data still shows 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.** 

#### 14-4162 #1 CHILL WATER SUPPLY PUMP

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

#### 15-4161 CENTER CHILLED WATER SUPPLY PUMP

Motor vibration data shows what looks to be elevated 1x and 2x RPM vibrations. Check the unit speed to insure correct analysis. Inspect the drive train for wear and alignment. Check the structure and fasteners. Possible loose motor bearings or fits. **Rated a Class II Defect.** 

#### 15-4162 E CHILLED WATER SUPPLY PUMP

Motor vibration data still 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.**