

August 27, 2021

IFF

Subject: MS2P Late August Vibration Report

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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.

**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.

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

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## **MS2P**

### **14-4007 CIP WATER RINSE TANK HEAT PUMP**

The inboard pump vibration data is dominated by 1x and 2x RPM vibrations. Inspect the pump fasteners, base, structure, coupling, and shaft alignment. **Rated a Class II Defect.**

### **15-3843 2P FD FILTER TRANSFER BLOWER**

Blower shaft speed vibrations are still strong in the motor verticals. Check drive train components for wear, eccentricity, alignment, and ensure all structures and fasteners are good. The motor data still shows that possible early bearing defect frequencies are present. Ensure the motor bearings are lubricated if applicable. **Rated a Class II Defect.**

### **15-3844 MS2P FEED DRYER EXHAUST FAN**

Motor data suggests wear in drive train components. High vibration at 16.3 Hz. Vibrations have increased again. Inspect next opportunity. Check belts, sheaves, fasteners, base, and structures. **Rated a Class III Defect.**

### **15-4019 CIP CAUSTIC RECIRC HEAT PUMP**

Motor still has an elevated 1x RPM axial vibration. Inspect for coupling and alignment issues. Perform a run out check and ensure all fasteners are tight. **Rated a Class II Defect.**

### **15-4085 #1 CONCENTRATI CENT SHARPLES**

Centrifuge bearings shows a very strong shaft speed vibration and multiple low harmonics. Clean and flush the centrifuge. The B4 measurement shows a large increase in harmonics. Check all the bearing fasteners and make sure the bearings are not cocked or have loose fits, and that drive belts and sheaves are aligned and tensioned properly. **Rated a Class III Defect.**

### **15-4108 BELT PRESS DISCHARGE SCREW CONVEYOR 5**

Limited data showing a possible 2x RPM motor axial vibration, a large, elevated noise floor in the B1H measurement, and note codes showing "FIELD ALERT" leads us to report this as a **Rated a Class III Defect.** Please inspect this installation completely at the next opportunity.

### **15-4203 HOT WATER PUMP PRESS IND IN**

Motor vibrations have increased and still have a strong 1x RPM axial vibration and lower amplitude vertical vibration. Inspect for coupling and alignment issues. Perform a run out check and ensure all fasteners are tight and structures are sound. **Rated a Class III Defect.**

**15-4209 90 DEG F PROCESS WATER PUMP #2**

There has been an increase in shaft speed vibrations in the motor and especially the pump. The pump data also seems to indicate cavitating. Inspect for coupling and alignment issues. Perform a run out check and ensure all fasteners are tight and structures are sound. Make sure the pump operates optimally. **Rated a Class II Defect.**

**15-8008 MS2P STATIC FLUID BED FAN**

Motor and fan have a dominant vibration at shaft speed. Inspect the unit fasteners and drive train. **Rated a Class II Defect.**