

Date: 9-22-20

Almatis

Subject: September 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 don't hesitate to call if you have any comments or questions.

Sincerely,

Dewey Keen
PDM Technician 3
QualiTest ® Diagnostics

Division of *Hi-Speed* Industrial Service

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Defects

Calcine Lift Blower #2

We suggest an inspection of the motor, including a lift check, and run out check on the shaft to see if the looseness can be found. We also recommend a torque inspection of all fasteners for proper torque.

CLASS II

Calcine #1 Primary Fan

We recommend a lift and run out check of the shaft as well as an inspection of the fan and housing for any obvious signs of degradation.

CLASS II

Calcine #3 Cooling Water Pump

We suggest an inspection of the bearings of this pump to see where the degradation is. This asset is thought to be in extreme danger of failure.

CLASS IV