



QualiTest® Diagnostics

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July 10, 2019

Aria Energy
Millington, TN

The following is a summary of findings from the July 2019 vibration survey at your facility. 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.

Defects

HX453C Vac Pump Oil Cool Fan

Vibration data is showing signs of bearing defects. Motor bearings will need to be replaced in the near future. We will monitor this issue closely. Rated as a **CLASS II** defect.

HX453D Vac Pump Oil Cool Fan

Vibration data is showing signs of bearing defects. Motor bearings will need to be replaced in the near future. We will monitor this issue closely. Rated as a **CLASS II** defect.

101B Feed Compressor

Data of the compressor does vary some month to month due to load; with acceleration being highest in the compressor second stage axial. We will continue to monitor this closely. Rated as a **CLASS I** defect.

HX507B Gas Cool Fan

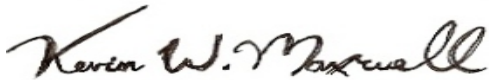
Drive end motor bearing is now showing signs of bearing defects. We will monitor this issue closely. Rated as a **CLASS II** defect.

HX507C Gas Cool Fan

Data of the top (DE) motor bearing is showing some increased vibration associated with bearing defects/wear. Motor will need to be swapped out SOON. We will monitor this closely. Rated as a **CLASS III** defect.

As always, it has been a pleasure to serve Aria Energy. If there are any comments or questions, do not hesitate to contact us.

Sincerely,



ISO Certified Vibration Analyst, Category III



QualiTest® Diagnostics

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