



**QualiTest® Diagnostics**

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June 25, 2025

Nucor General Recycling

Subject: June vibration survey

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Most of the machines surveyed were found to be in good condition except for 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.

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

Sincerely,

ISO Certified Vibration Analyst, Category III

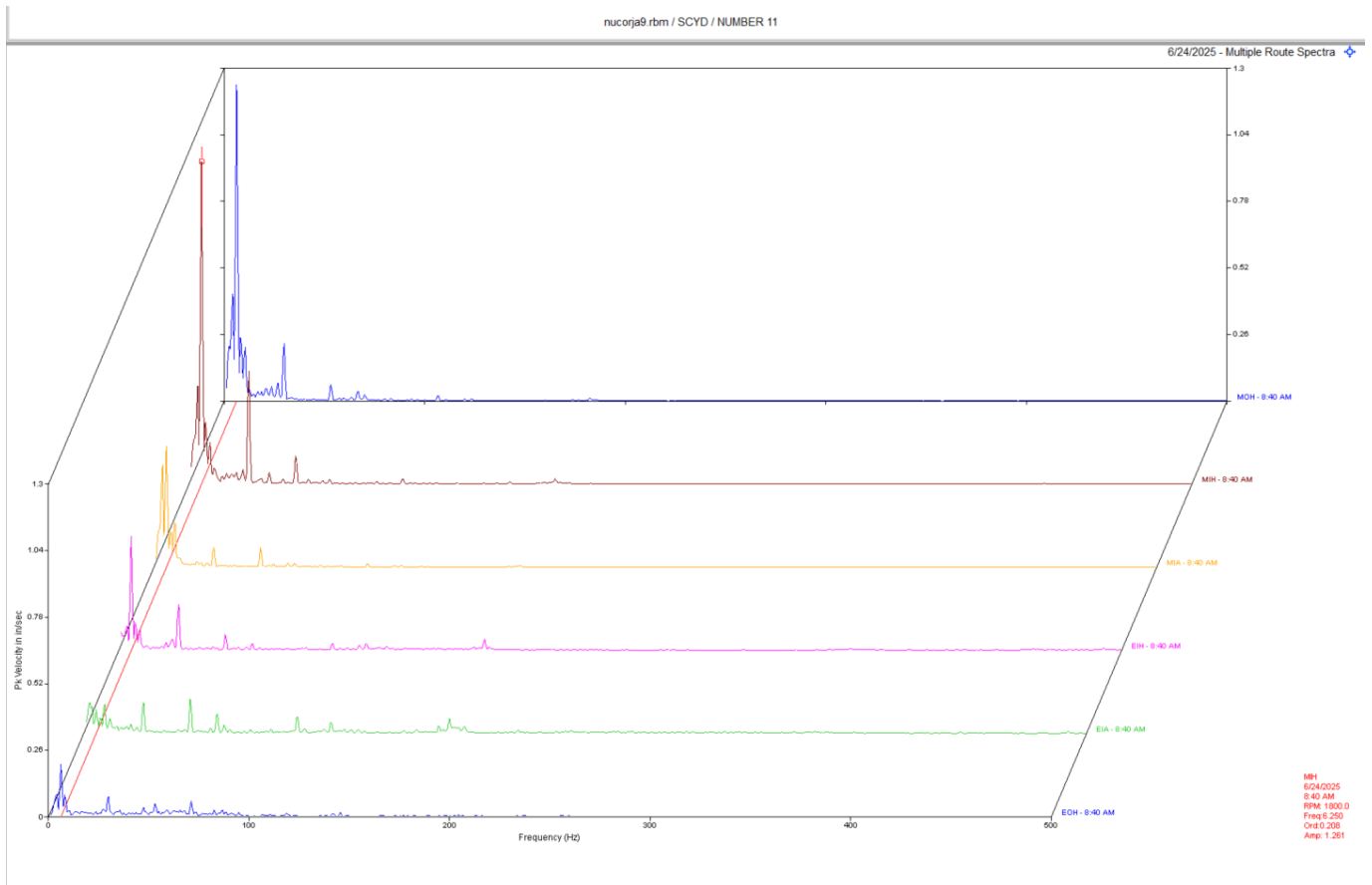


**QualiTest® Diagnostics**

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## Defects



### Conveyor 11

Overall vibration is lower since last survey but still remains above alarm level. Vib appears to be at a low frequency of 6 Hz. This may be belt frequency or output frequency. Ensure sheaves are aligned properly. Ensure conveyor shaft or gear output shaft is not bent. Gearbox data also shows some signs of internal wear. Rated as a **CLASS II** defect.

Abbreviated Last Measurement Summary  
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Database: nucorja9.rbm  
Station: Scrap Yard

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
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SHREDDER - SHREDDER (24-Jun-25)		
	OVERALL LEVEL	1K-20KHz
MOH	.109 In/Sec	.067 G-s
MOV	.156 In/Sec	.070 G-s
MIV	.209 In/Sec	.125 G-s
MIH	.115 In/Sec	.283 G-s
MIA	.102 In/Sec	.300 G-s
CYCLONE - CYCLONE (24-Jun-25)		
	OVERALL LEVEL	1K-20KHz
MOH	.190 In/Sec	.559 G-s
MIH	.219 In/Sec	.657 G-s
MIA	.264 In/Sec	.153 G-s
EIH	.173 In/Sec	.038 G-s
EOH	.251 In/Sec	.018 G-s
M3 - MAG DRUM (24-Jun-25)		
	OVERALL LEVEL	1K-20KHz
MOH	.060 In/Sec	.091 G-s
MIH	.035 In/Sec	.249 G-s
MIA	.052 In/Sec	.047 G-s
GIH	.037 In/Sec	.086 G-s
GOH	.024 In/Sec	.079 G-s
IDB	.016 In/Sec	.0088 G-s
ODB	.024 In/Sec	.0036 G-s
NUMBER 11 - NUMBER 11 (24-Jun-25)		
	OVERALL LEVEL	1K-20KHz
MOH	1.431 In/Sec	.171 G-s
MIH	1.489 In/Sec	.643 G-s
MIA	.742 In/Sec	.812 G-s
EIH	.571 In/Sec	4.491 G-s
EIA	.460 In/Sec	3.879 G-s
EOH	.333 In/Sec	.403 G-s

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Clarification Of Vibration Units:

Acc	-->	G-s	RMS
Vel	-->	In/Sec	PK