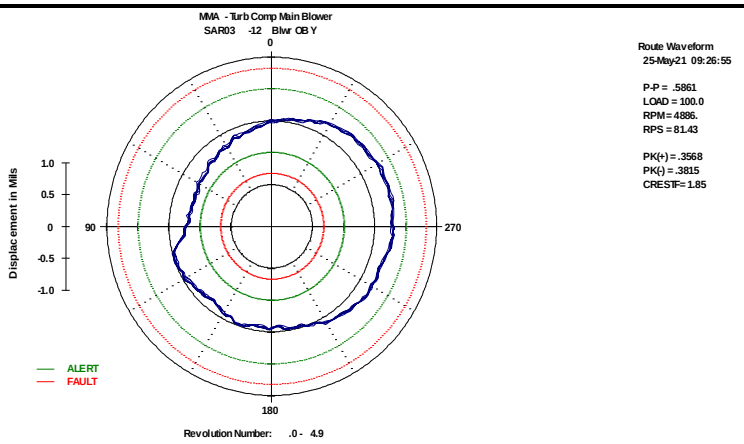
HI-SPEED PREDICTIVE MAINTENANCE

Machinery Vibration Report

Client	Mitsubishi Chemicals	**Survey Date**	5-25-2021
Location	Memphis, TN	**Report Date**	6-11-2021
Machine	SAR 03 Turbine Compressor Main Blower	**QMS No.**	145447
Component	Point 12 data (Outboard Y)	**Analyst**	DWS

Defect Rating for this machine	NR
Defect Rating System	
Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue normal monitoring.	**Class III;** Defect (s) present that may cause failure in short term (less than 2 mos.). Should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.
Class II: Defect (s) present that may cause problem in long term (2-6 mos.). Repair during normal maintenance scheduling. Continue to monitor.	**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.***

Vibration Data



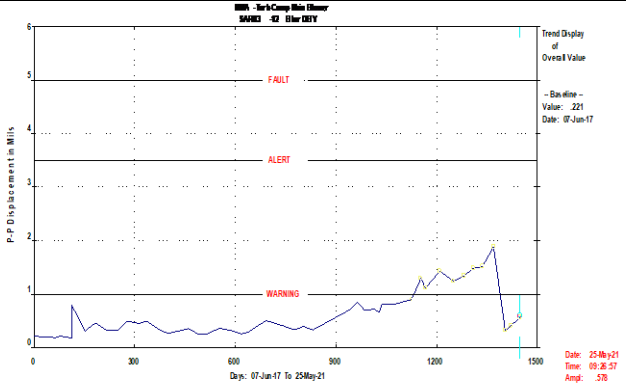
Analysis

Point 12 data. Slight increase.

Discussion / Repair recommendations

Vibrations still appear to be acceptable. **Non-rated.**

Trend Data



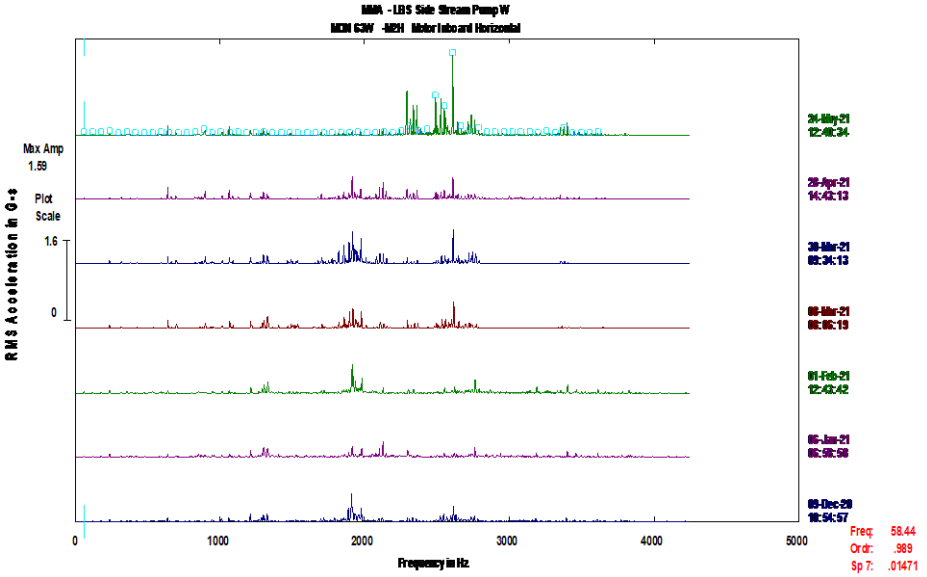
HI-SPEED PREDICTIVE MAINTENANCE

Machinery Vibration Report

Client	Mitsubishi Chemicals	**Survey Date**	5-24-2021
Location	Memphis, TN	**Report Date**	6-11-2021
Machine	MON 63W LBS Side Stream Pump West	**QMS No.**	145447
Component	Motor	**Analyst**	DWS

Defect Rating for this machine	**CLASS II**
Defect Rating System	
Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue normal monitoring.	**Class III;** Defect (s) present that may cause failure in short term (less than 2 mos.). Should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.
Class II: Defect (s) present that may cause problem in long term (2-6 mos.). Repair during normal maintenance scheduling. Continue to monitor.	**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.***

Vibration Data



Analysis

Increase in vibration peaks in the motor bearing data.

Discussion / Repair recommendations

Vibration data shows an increase in synchronous and non-synchronous peaks in the spectrum for the motor bearings. We suspect bearing defects are present. Ensure adequate bearing lubrication if applicable. Prepare to change out the motor in the future. **Rated a Class II Defect.**

Trend Data