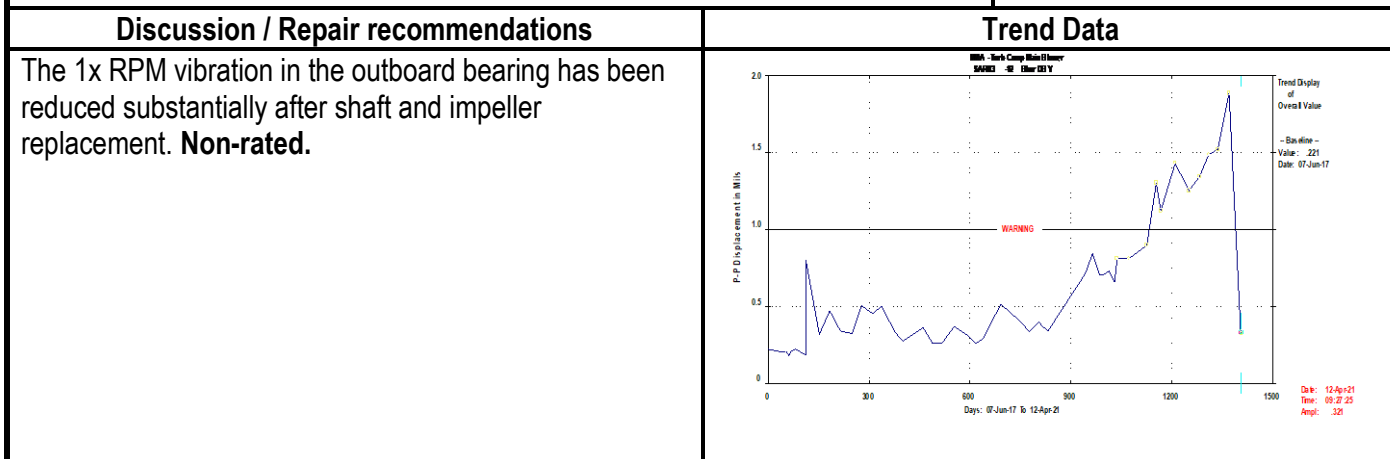
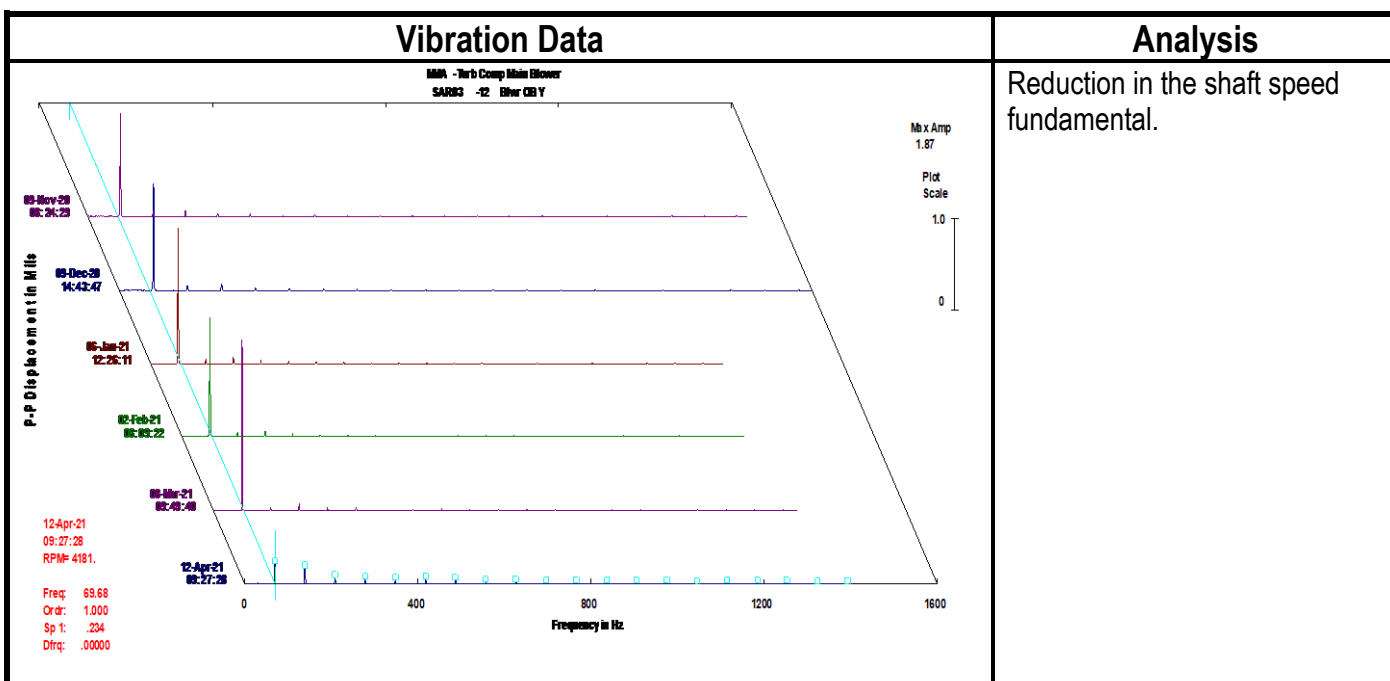




Client	Lucite	Survey Date	4-12-21
Location	Memphis, TN	Report Date	4-20-21
Machine	SAR 03 turbine compressor main blower	QMS No.	145039
Component		Analyst	DWS

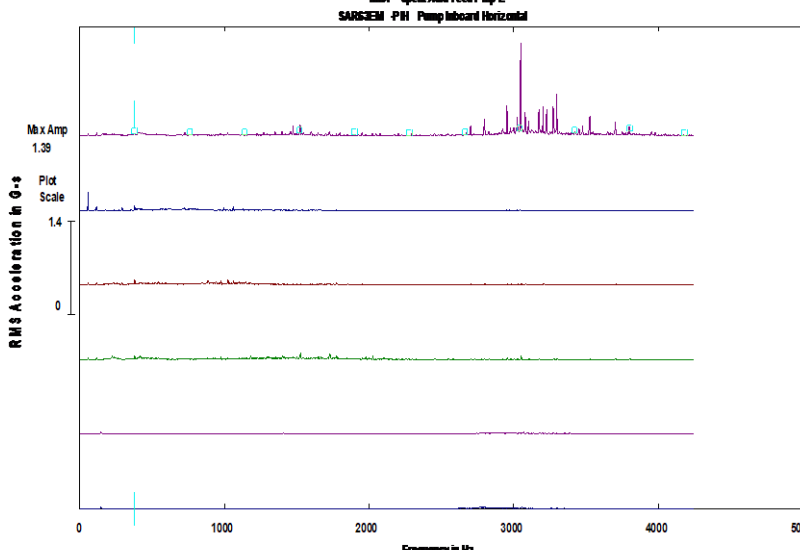
Defect Rating for this machine	NA
Defect Rating System	
<b>Class I:</b> Defect is present, but effect on reliability is not clear; no immediate action is required. Continue normal monitoring.	<b>Class III:</b> Defect (s) present that may cause failure in short term (less than 2 mos.). Should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.
<b>Class II:</b> Defect (s) present that may cause problem in long term (2-6 mos.). Repair during normal maintenance scheduling. Continue to monitor.	<b>Class IV:</b> Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. <b>Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs.</b>

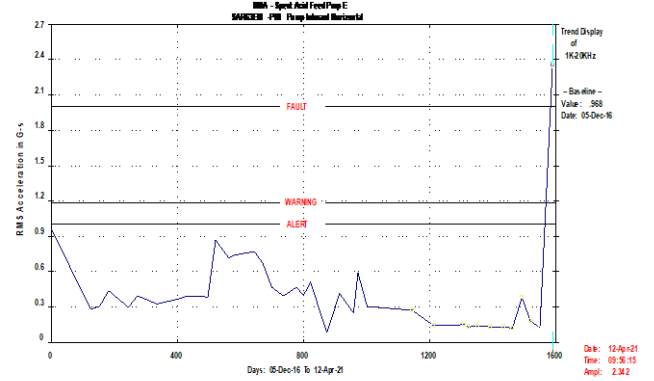




Client	Lucite	Survey Date	4-12-21
Location	Memphis, TN	Report Date	4-20-21
Machine	SAR 63EM Spent Acid Feed Pump E	QMS No.	145039
Component	Pump	Analyst	DWS

Defect Rating for this machine	<b>Class III</b>
Defect Rating System	
<b>Class I:</b> Defect is present, but effect on reliability is not clear; no immediate action is required. Continue normal monitoring.	<b>Class III:</b> 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.
<b>Class II:</b> Defect (s) present that may cause problem in long term (2-6 mos.). Repair during normal maintenance scheduling. Continue to monitor.	<b>Class IV:</b> Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. <b>Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs.</b>

Vibration Data	Analysis
<p>MM - Spent Acid Feed Pump E SAR63EM - PH Pump Inboard Horizontal</p>  <p>Max Amp 1.39 Plot Scale 1.4 RMS Acceleration in G</p> <p>Frequency in Hz</p> <p>12-Apr-21 02:52:19 04-Mar-21 18:06:00 01-Feb-21 18:04:46 06-Jan-21 18:15:04 07-Dec-20 12:02:26 09-Nov-20 18:23:12</p> <p>Freq: 379.84 Ord: 6.375 Sp 6: .02441</p>	<p>Large jump in pump non-synchronous vibrations.</p>

Discussion / Repair recommendations	Trend Data
<p>The pump data indicates a large increase in non-synchronous vibrations that are most like bearing defects. Recommend inspecting the unit and changing the bearings at the next opportunity. The large change prompts us to rate this a <b>Class III Defect</b>.</p>	 <p>Trend Display of 162.96Hz</p> <p>Baseline Value: .968 Date: 05-Dec-16</p> <p>FAULT WARNING ALERT</p> <p>Days: 05-Dec-16 to 12-Apr-21</p> <p>Date: 12-Apr-21 Time: 00:36:15 Ampl: 2.382</p>