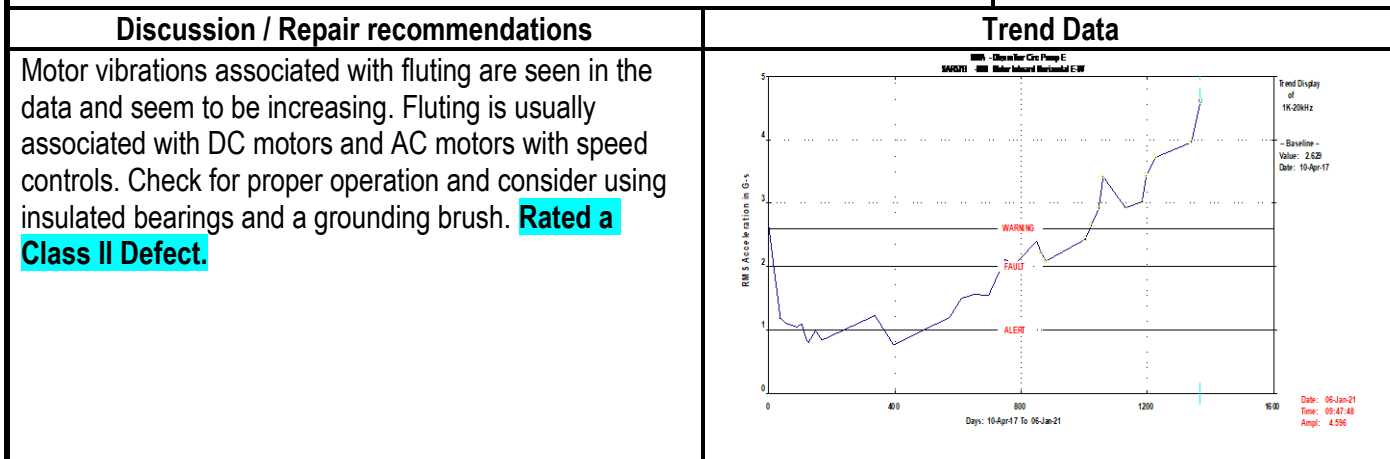
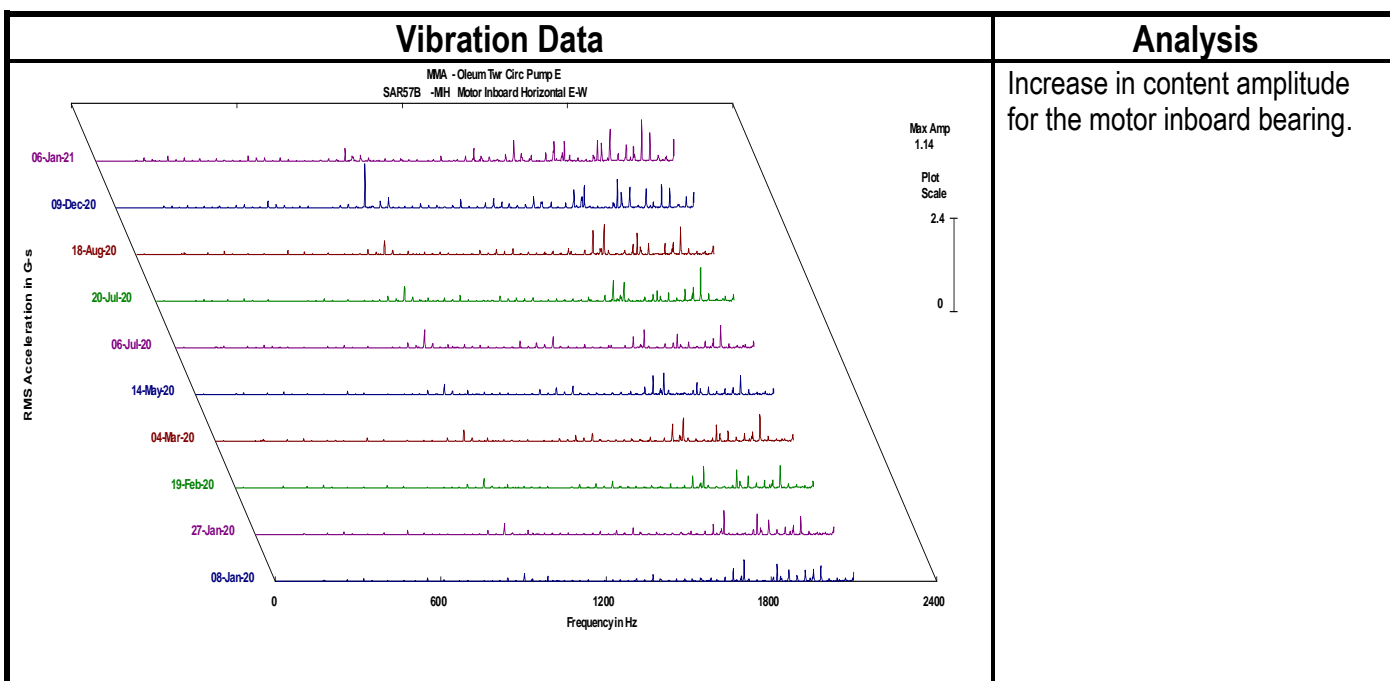




Client	Lucite	Survey Date	1-6-21
Location	Memphis, TN	Report Date	1-7-21
Machine	SAR 37B Oleum Tower Circulation Pump East	QMS No.	1441xx
Component	Motor	Analyst	DWS

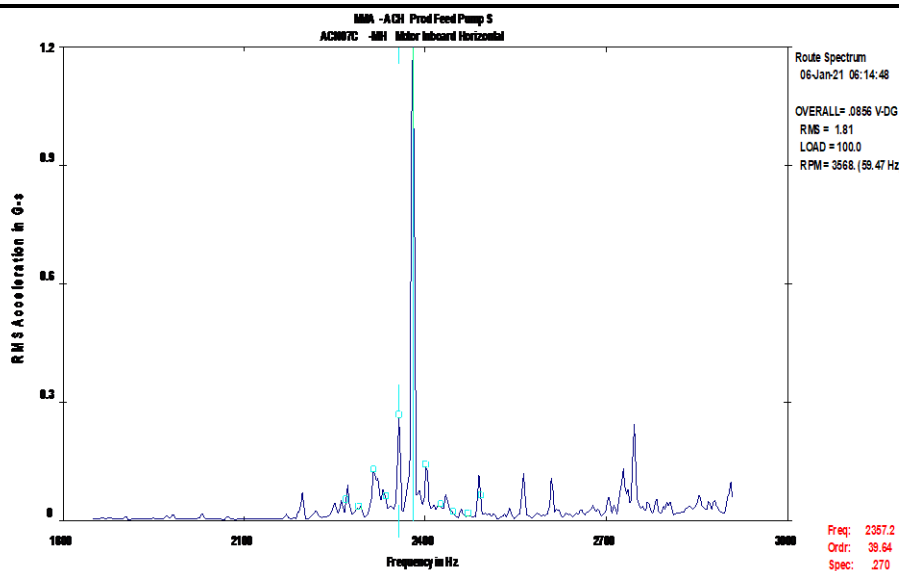
Defect Rating for this machine	Class II
Defect Rating System	
Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue normal monitoring.	Class III: Defect (s) present that may cause failure in short term (less than 2 mos.). Should be addressed as 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.

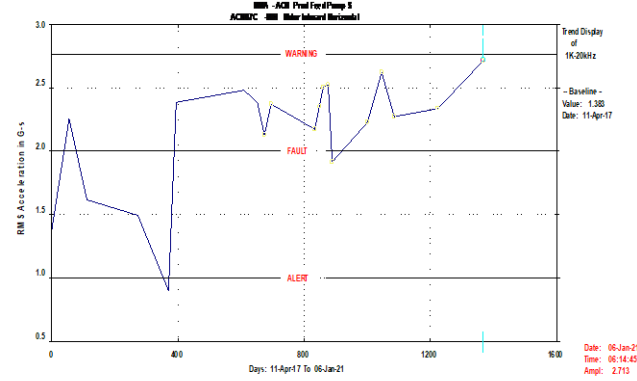




Client	Lucite	Survey Date	1-6-21
Location	Memphis, TN	Report Date	1-7-21
Machine	ACN 07C ACH Product Feed Pump South	QMS No.	1441xx
Component	Motor Bearings	Analyst	DWS

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.

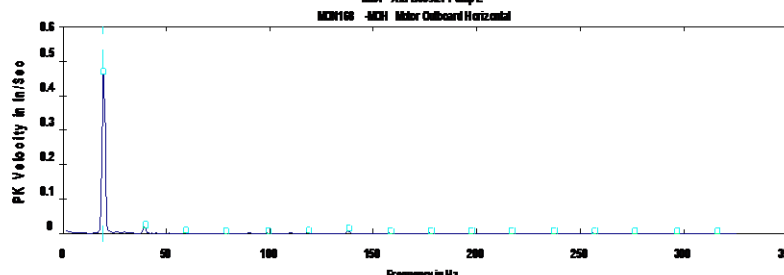
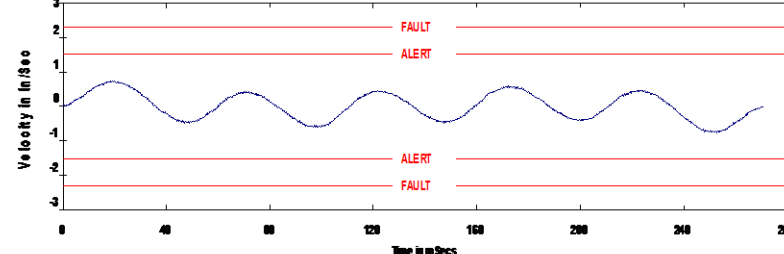
Vibration Data	Analysis
	Sidebands of possible cage frequency surround a vibration peak associated with an outer race defect frequency.

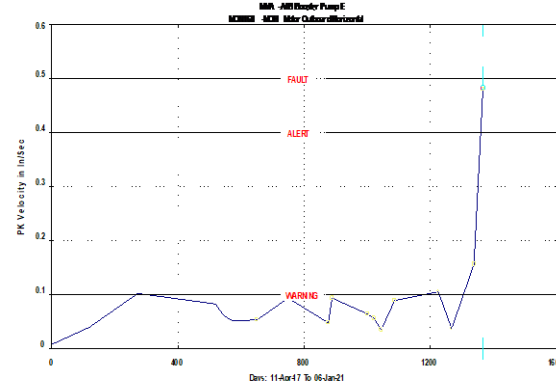
Discussion / Repair recommendations	Trend Data
Data indicates possible bearing cage defects as well as outer race defects present in the inboard motor bearing. Be prepared to change out the motor in the future. Rated a Class II Defect.	



Client	Lucite	Survey Date	1-6-21
Location	Memphis, TN	Report Date	1-7-21
Machine	MON 168 AB Booster Pump East	QMS No.	1441xx
Component		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
<p>MON 168 - AB Booster Pump E</p> <p>MON168 - MON Motor Outboard Horizontal</p>  <p>Route Spectrum 06-Jan-21 10:17:59 OVERALL= .4811 V-DG PK = .4789 LOAD = 100.0 RPM = 1185, (19.75 Hz)</p>  <p>Route Waveform 06-Jan-21 10:17:59 PK = .5405 PK(4/3) = .7492/7556 CRE STR= 1.98</p> <p>Freq: 19.75 Ordr: 1.000 Spec: .477</p>	<p>Jump in shaft speed vibration in the motor.</p>

Discussion / Repair recommendations	Trend Data
<p>Large jump in motor vibration as measured in the outboard horizontal. Inspect the unit for defects. Check foot bolts, coupling initially and then the shaft alignment as time allows. Rated a Class II Defect.</p>	 <p>Trend Display of Overall Value</p> <p>Baseline Value: .0812 Date: 11-Apr-17</p> <p>Date: 06-Jan-21 Time: 10:10:52 Ampl: .481</p>



Client	Lucite	Survey Date	1-6-21
Location	Memphis, TN	Report Date	1-7-21
Machine	SAR 03 Turbine Compressor Main Blower	QMS No.	1441xx
Component	Bearing	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.

