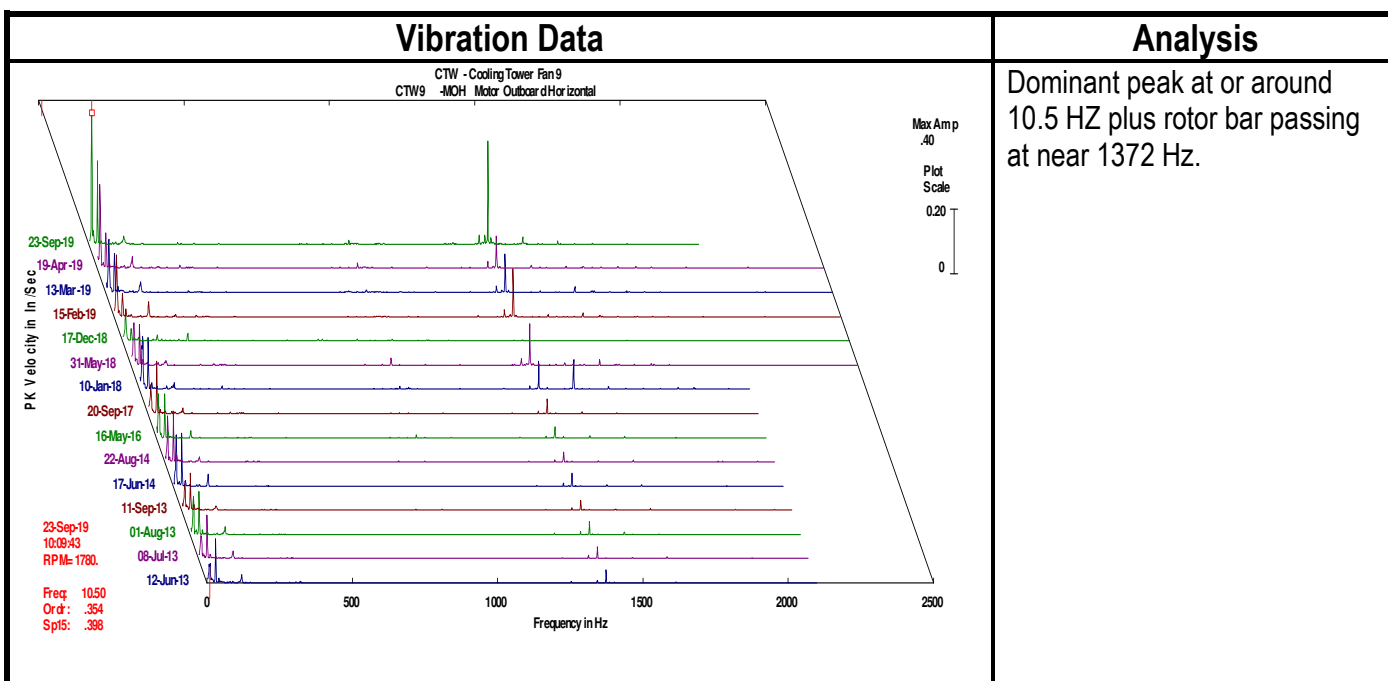
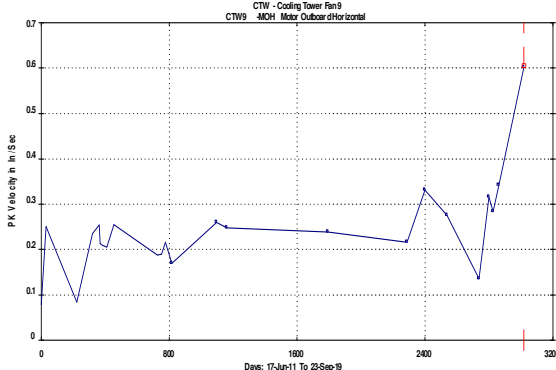




Client	A.E.C.I. Dell	Survey Date	9-22-19
Location	Dell, AR	Report Date	9-26-19
Machine	Cooling Tower Motor 9	QMS No.	140288
Component	Fan Unit	Analyst	DWS

Defect Rating for this machine	NA
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.

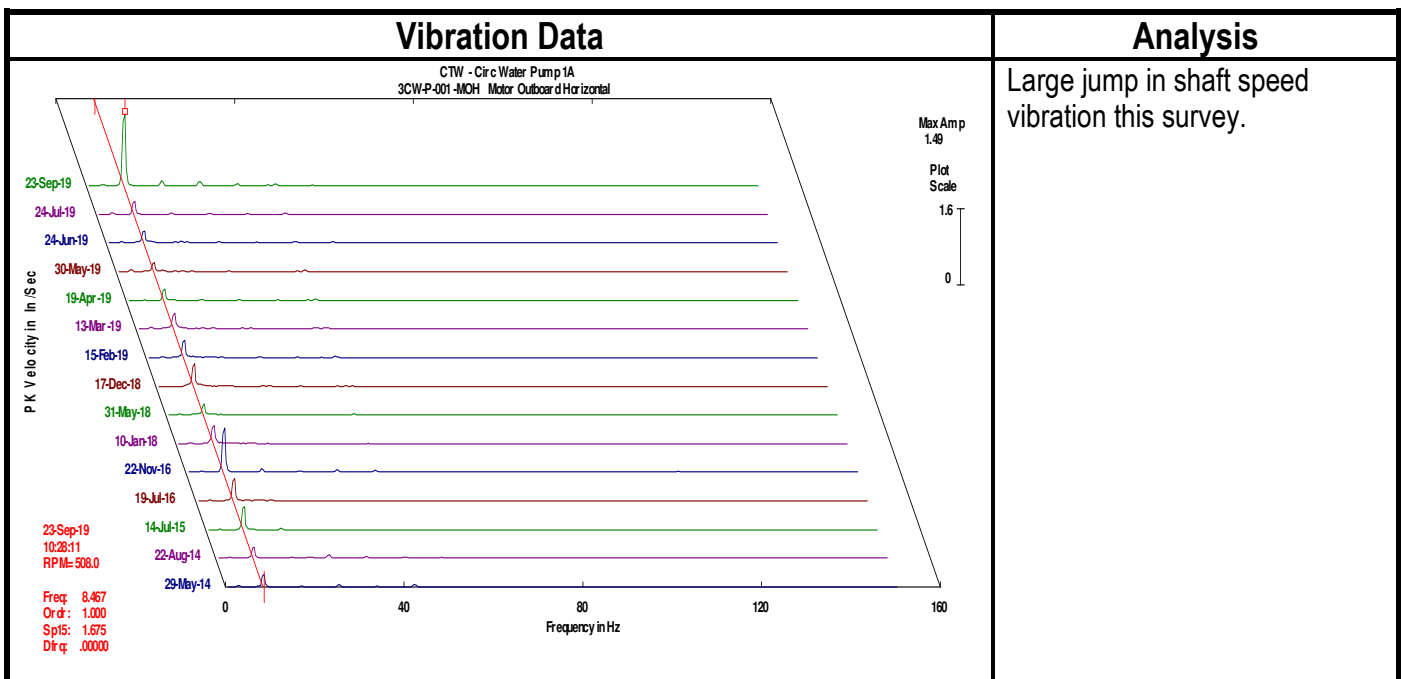


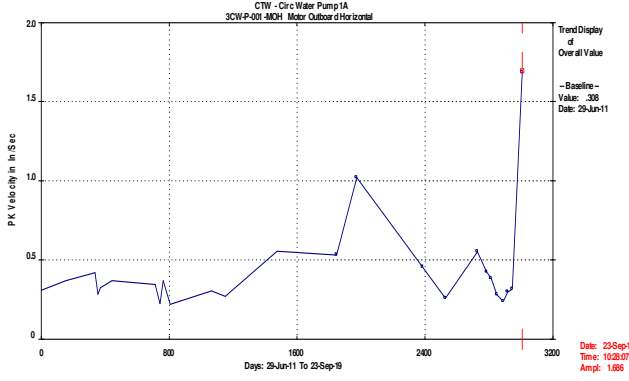
Discussion / Repair recommendations	Trend Data
<p>The data shows the motor is vibrating at near fan speed. It has jumped after the tower rebuild. Inspect the unit for defects associated with the fan and drive train. Inspect the structure and fasteners. Motor shows highest rotor bar passing vibration also, probably increasing from greater load.</p> <p>Rated a Class II Defect.</p>	 <p>CTW - Cooling Tower Fan 9 CTW9 - MOH Motor Outboard Horizontal</p> <p>Trend Display of Overall Value Baseline Value: .07823 Date: 17-Jun-11</p> <p>23-Sep-19 Time: 10:09:50 Amp: .601</p> <p>Days: 17-Jun-11 To 23-Sep-19</p>



Client	A.E.C.I. Dell	Survey Date	9-22-19
Location	Dell, AR	Report Date	9-26-19
Machine	Circulating Water Pump 1A	QMS No.	140288
Component	Unit	Analyst	DWS

Defect Rating for this machine	Class IV
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.



Discussion / Repair recommendations	Trend Data
<p>The pump unit is vibrating at high levels at the fundamental speed. Vibrations are somewhat directional which is typical for vertical pumps generally due to stiffness from piping. We suspect something has damaged the pump or is stuck in it. Vibrations at the amplitudes are damaging to the unit. Inspect the unit as soon as possible. Rated a Class IV Defect.</p>	 <p>Trend Display Overall Value Baseline Value: .308 Date: 25-Jun-11</p> <p>Date: 23-Sep-19 Time: 10:28:07 Amp: 1.686</p>