

# Vibration Analysis



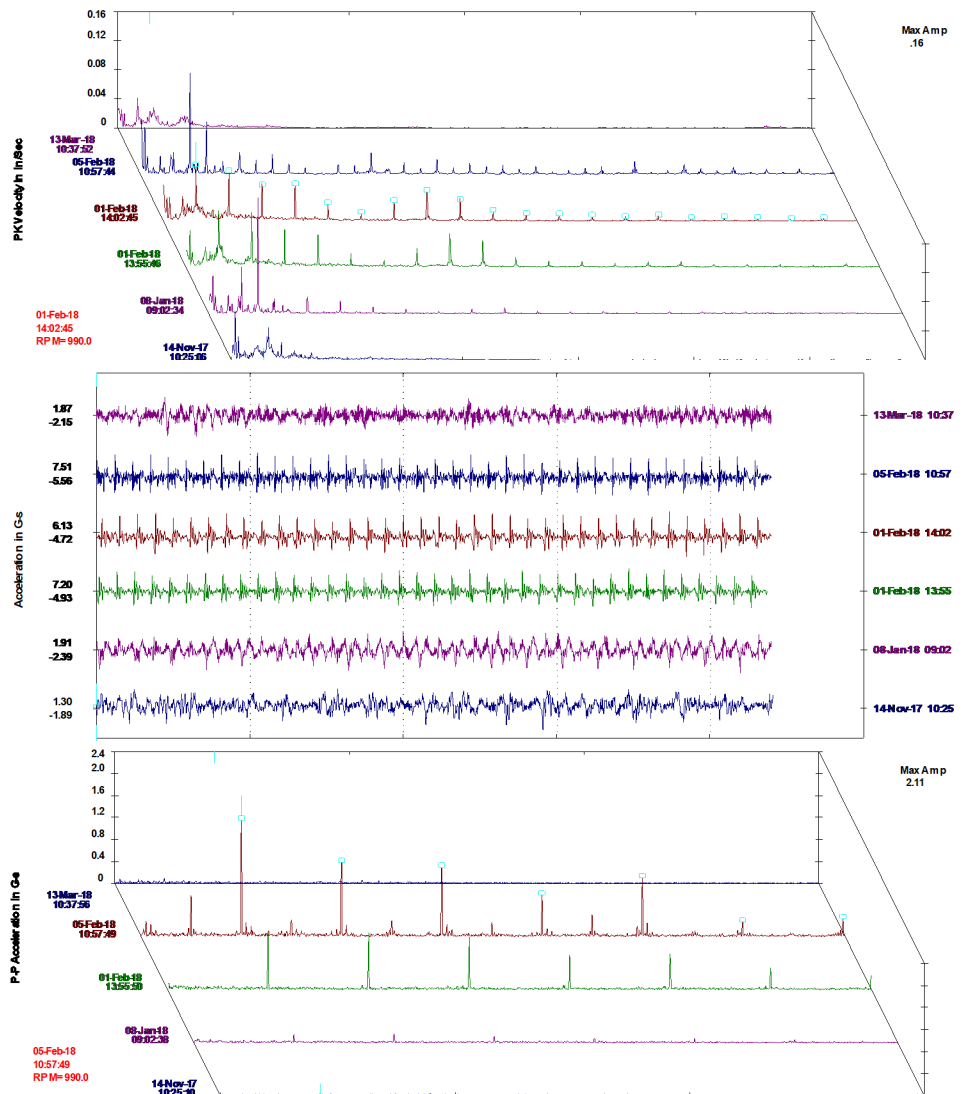
## Bearing fault large gearbox

Bearing was in service for five months, monthly vibration monitoring indicated bearing was continuing to degrade.

Gearbox is pressure lubricated by gear driven oil pump.

200 Hp electric motor with banded belt drives the gearbox input shaft

- Previous gearbox was in service for 15+ years
- Gearbox loads and unloads repeatedly
- Vibration data indicates outer race fault
- Steady increase in values for the spectrum and waveform
- Input shaft tapered roller bearing lock nut loosened causing bearing alignment to change
- Outer race found to have a “bump” with no other damage
- Peakvue data indicates outer race fault with cage sidebands
- Prevented catastrophic failure of bearing, secondary damage
- Customer was able to plan and schedule work around production demands
- No backup gearbox
- Potential savings \$10,000+



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