



Catch of the week



Defective Lube Oil Pump for a Generator Discovered on an Offshore Oil Platform

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What did the Proficy SmartSignal software find?

In late November, the Proficy SmartSignal solution detected that a diesel driven generator came back online, after a 3 day outage, with lube oil pressure that was lower than expected. Given the operating conditions, lube oil pressure should have been operating around 4 BARG. However, actual lube oil pressure was operating around 3.5 BARG. The Availability & Performance Center began tracking this issue and discussed it with the client on the regular weekly call.

What was the underlying cause?

When the client investigated this issue, they determined that the lube oil pump was defective. The client was able to schedule an outage and replace this lube oil pump.

What was the value to the client?

The client had the opportunity to identify a faulty lube oil pump before the pump failed. This allowed the client to avoid the costs of performing emergency repairs of this pump. In addition, if this pump had failed while operating, it would have tripped the generator offline. This loss of power could have forced the platform to reduce or cease production, causing significant revenue losses for the client. Upon replacement of the lube oil pump, the Availability & Performance Center was able to help the client verify their maintenance action was successful by showing that lube oil pressures returned to expected values.

Who found it?



Jenn Khong,
Customer Reliability
Engineer



Mike Roe,
Customer Reliability
Manager



Screenshot depicting actual values (blue) and expected values (green). Lube oil pump motor speed shown in top graph. Lube oil pressure shown in middle graph. Lube oil temperature shown in bottom graph.