Cummins Surveillance Panel
September 26, 2014
Teleconference Meeting Minutes
11:00 A.M. EDT

Attendance:

TEI-Dan Lanctot, Zach Bishop
Intertek-Jim Moritz, Mey Dewey
Martin Thompson, Jose Starling
Afton-Bob and Christian
Infineum-Elisa Santos
Lubrizol-Michael Conrad, Nick Secue, Kevin O'Malley
TMC-Sean Moyer
ChevronOronite-Jim Rutherford

Cummins ISM Filter Plugging Mild Alarm

Kevin O'Malley presented an updated version of the ISM Industry Severity presentation from the last meeting.
Slide 9 – Pulled in 830-2 data and matrix runs. This data was brought in to help determine the transformation method used. Log transformation is still appropriate due to statistically different variances. Kevin presented an option for piecewise correction factors but indicated that he did not like the idea. Discussion about what targets we should be correcting to. Should we adjust the standard deviation because the precision has changed?

Jim Moritz sent photos of oil filter cartridges showing that some of the filter cartridges are not square and explained how this condition could potentially lead to a leakage path from the high pressure side to the low pressure side and would cause a false reading of the oil filter delta pressure. Jim also went over some calculations that he performed to shift the scale of the currently running tests. There seems to be an offset of around 4kPa in the mild direction. This led to discussion about the best method for coming up with a linear correction factor. After much discussion it was pointed out that there are only about 40 filters left at TEI. Dan Nyman of Cummins is working to get a new batch of filters but it will take some time.

There was more discussion about how to proceed. Analyze data in the transformed space and compare that to a limit value (that would need to be defined by the panel) in order to calculate a linearization value to correct the data to going forward. Should we be adding in the correction factor before doing the transformation?

Kevin O'Malley will go back and analyze the data on the new mesh filters and calculate a correction factor adding a correction in engineering units and then doing the transform and also a straight average in engineering units.

The next meeting will be on October 1st at 10:30 am EDT.