

# **Mack Surveillance Panel**

**Wednesday May 16, 2012**  
**10:30 a.m. – 11:30 a.m. Eastern Time**  
**Dial-in number:**  
**877-344-4239**  
**Passcode:**  
**811999#**

## **Mack Surveillance Panel Meeting Notes**

The conference convened at 10:30 a.m. Eastern time, with Mark Cooper acting as Surveillance Panel Chair.

### **Membership / Attendance**

**Mark Cooper**

Mike Alessi, Zack Bishop, Doyle Boese, Jeff Clark, Mark Cooper, Jim Gutzwiller, Jim Matasic, Jim Moritz, Sean Moyer, Jim Rutherford, Scott Richards, Addison Schweitzer, Greg Shank, and Tom Wingfield.

### **Review T-12 Industry Correction Factor**

**Jim Rutherford/Group**

At the May 2 Mack Surveillance Panel meeting, we decided to set up a teleconference to discuss updates to the industry correction factors for the Mack T-12. Jim Rutherford stated that TRWL and MRV had one result that stood out from the rest. A narrowing data trend was commented on by Jim on the most recent ten tests. Version II LTMS was to handle the issue pertaining to Correction Factors that were significantly different from previous ones. Severity Adjustments are applied to reference test results. Regression analysis with respect to the labs were shown in the model. Hardware differences and the magnitude of corrections were mentioned as an issue. An additional issue mentioned was by not applying Severity Adjustment's to reference tests this could skew the Correction Factors.

Jim Rutherford reviewed the proposed Correction Factor's presented in the attachment. Jim stated that the data was prior to any corrections being applied.

Page 3: Reference Data  
Page 4: DPBEOT  
Page 5: TRNDPB  
Page 6: TRNDPB2  
Page 7: TRNOC  
Page 8: ALW  
Page 9: ATRWL  
Page 10: MRV100  
Page 11: Proposed Correction Factors

A question was brought up to the panel: Why not use all data? Jim responded that the latest ten tests showed data tightening up. Upon review of the data, hardware could potentially be shifting within a batch.

Greg Shank stressed the necessity to prevent over-correcting data that no longer presented itself as an issue. Another issue was reminded to the panel that utilizing the most recent data to obtain Correction Factors could mask severity trends within the industry. Jim Rutherford reminded the panel that the ten most recent tests proved to be a good indicator of recent trends. Scott Richards questioned whether real time Correction Factor's were considered, however the panel did not see that as a viable option. Statistical analysis was decided as a more concrete way to decide upon Correction Factors. Jim Rutherford was asked to review Correction Factor's on seventeen tests versus ten by Greg Shank.

Jim Rutherford provided the response below:

CLW	TRWL	OC	DPB	DPB2	MRV
0.95	0.86	1.0	0.95	0.95	105

Log transformation correction was discussed and decided to be taken into account when deciding on Correction Factors.

Mark Cooper established issues to for the panel to address:

Are the Correction Factor's warranted?

How many tests would be required to establish acceptable Correction Factors?

Should the Correction Factor's be decided upon utilizing additive or transformed units?

What are (if any) differences between the test labs?

The panel agreed that a correction factor was needed appeared warranted for cylinder liner wear. The panel questioned the need to correct data that was within the noise band. Additionally what was the difference in Correction Factors between seven, ten, seventeen, and all tests?

It was reminded to the surveillance panel that the Correction Factors are the same for every lab. Test lab raw data is utilized to calculate Correction Factors, whereas the reference test results are used to calculate Severity Adjustments. Therefore, the lab charts would change with the modification of the Correction Factors. The surveillance panel should also consider if the current Correction Factors should be kept if the Severity Adjustments are performing their duty well. Modeling the test labs was mentioned, but it might not deal with the issue presented by this test.

Jim Rutherford was asked if the differences in the test results real. In general, Jim answered no. The surveillance panel agreed to revisit this issue at a regular interval to address and/or confirm the Correction Factors. Greg Shank stated that cylinder liner wear indicated that a change to Correction Factors was needed. Hardware batches were still in need of Correction Factors over batches. The Mack Surveillance Panel needs to have perspective on what they want to implement/revise on the Correction Factors and collectively agree on guidelines.

**Action Item:**

Greg Shank asked Jim Rutherford and Doyle Boese to model and review the data on the proposed Correction Factors further.

\*Note: See attachment to review Jim Rutherford's analysis and proposed modifications to correction factors.

The issue that exists is that the supplier can no longer provide this particular reference oil (cannot be re-blended). There is an estimated 1 year supply remaining. This reference oil affects CAT-1P, 1R, EOAT, RFWT, and T-8/E test types. Greg Shank was currently addressing this issue with the supplier, meaning that the reblending position of 1005 may have changed.

**Action Item:**

Greg Shank agreed to provide the surveillance panel with an update on the availability of 1005 and the T-8 on May 31<sup>st</sup>.

**Old Business / New Business**

**Mark Cooper**

Zack Bishop mentioned that the bushing is press fit from one side of the rod as a possible source of the connecting rod failure issues experienced in the test lab industry on the Mack T-12

**Action Item:**

Zack Bishop (with support from Ken Goshorn) takes as an action item to contact Ohio and MRC to set up investigation of connecting rod failure issues on the Mack T-12. Zack Bishop will provide the industry with the information to schedule the trip to address this issue.

**Next Meeting**

**Mark Cooper**

Proposed teleconference Surveillance Panel Meeting for May 31<sup>st</sup> 2012 10:30 AM Eastern Time.

Meeting Adjourned at 11:00 AM Central time.