

L-42 Hardware Task Force Meeting Minutes

Teleconference

Dec. 4, 2012

Attendees:

B. Koehler (SwRI)	T. Gottwald (Afton/C)	L. Hamilton (LZ)	R. Thorpe (SwRI)
S. Parke (TMC)	J. Gropp (LZ)	D. Smith (Intertek)	
		M. Umerly (LZ)	

Purpose of Meeting

To determine a plan of action moving forward, after discussing the latest information from Dana about heat code differences between the pilot and full batches.

Summary

While conducting their first run for the industry hardware validation matrix (around Nov. 21), Lubrizol noticed that the pinions in the latest shipment of hardware (the full batch) had a different heat code stamp when compared to the pilot batch [full batch – C1L680, pilot batch – C1L691]. Further investigation by SwRI and Afton confirmed that this was the case across the entire order. Upon confirming this, the L-42 Chairman contacted Tim Hammer at Dana asking why the heat codes were different. On Dec. 3, Mr. Hammer called the L-42 Chairman to notify the industry that Dana's Ft. Wayne plant had used the wrong pinions in the pilot batch – ASTM had prescribed that both the ring and pinion should be made of 8620 steel. At some point in the Ft. Wayne process, ASTM pinions got switched out with production pinions (made from 5424 steel). Mr. Hammer also confirmed that the full L-42 order was completed using the correct ASTM specified ring and pinions (8620). It was noted that this change in material probably accounts for the drive-side scoring that was experienced in the pilot batch.

Discussion

All data from the pilot batch can no longer be used and should be thrown out because the axles were out of spec. Therefore, the TF agreed that it should seek reimbursement for the improperly assembled axles in the pilot batch, as well as full batch axles consumed using pilot batch stand settings.

ACTION ITEM:

The labs are to check with their purchasing groups to properly understand each lab's reimbursement procedures. Once completed, they will notify the L-42 Chairman who will then set up a teleconference between the TF and key players at Dana.

Labs will also determine lost number of axles (per lab).

Moving Forward and Approval Process

In determining how extensive the approval matrix must now be, the following attributes/goals must be met:

- Test stands must have enough adjustment room to tune in the pass/fail oils
- Upper/Lower limits for pinion scoring on tests with oil 116-1 (although somewhat arbitrary) must be examined and defined. The panel will solicit historical upper/lower limits for 116-1 from the TMC's Scott Parke
- Enough results at the 3 labs must be generated that the TF is confident that scoring with passing oil 116-1 is reasonable and repeatable
- Enough results at the 3 labs must be generated that the TF is confident that discrimination oil runs double pass run scoring. It was noted that oil 113 is not as severe as oil 112 was (on currently approved hardware).

Labs also expressed an interest in using the validation runs as reference runs. The labs agreed to let SwRI finish their approval matrix runs and to allow SwRI to have an extended reference period (for this period only) if all 12 industry runs can't be completed by the Dec. 17th meeting deadline.

The TF decided to stick with the original approval matrix size and to flush out as needed, pending the results on the original matrix.

Meeting adjourned