

**L42 Surveillance Panel Meeting minutes
PRI Apollo Room, Warrendale, PA
August 24, 2005**

Attendees:

Cory Koglin
Don Bell
Don Bartlett
Chris Schenkenberger
Jerry Gropp
Brian Koehler
Don Lind
Frank Farber
Dale Smith
Bill Sullivan
Harold Chambers
Ken Okamuro
Don Kreinbring

L42-1 Update

3 of 4 labs visits complete

- Final Visit week of September 5th
- 1 day to review stand, 2nd day to review procedure, reports, action items

The SP approved the below timeline and gate checks for the L42-1

1. Resolve Throttle body/controller issues (2 of 4 labs)-now until resolvedug
2. TF to make updates to procedure in Richmond Sept 7th based on lab visit findings
3. TF to agree upon graphs, plots, torque trace patterns, and TP traces-Sept 7th
4. All labs to address individual stand discrepancies based on lab visit findings
[If all labs agree on the above and feel comfortable.....](#)
5. Each lab to run 1 ref oil on new procedure, 604 gear batch and 116 oil
6. TF to review data/reports and obtaining the same torque levels.
7. TF to agree on running 2 more TMC 116 and one discrimination test on 604 gear batch
8. SP meeting to review current data and decide on further testing
9. Define lab precision running additional tests
10. If yes to #6 & #7 & #8, then procedure needs to be distributed and approved by S.P.
11. Research Report
12. Ballot subcommittee B

The TF suggested that they would like to implement new L42-1 procedure/engine, proceed down suggested path and not revert back to old procedure to approve new hardware, run Low temp testing, etc.

The issue of low temperature testing was discussed, but in general the SP was comfortable with running low temperature on the L42-1 as is currently stated in the procedure. The SP responded by wanting to run TMC 152 and 153 on the current L42 spec. The current status of only 1 lab (SWRI) running a L42 test presents a problem, but both Lubrizol and Exxon are willing to sponsor 1 test each at SWRI.

Action Item: SWRI and Afton are to check if they would each sponsor 1 test.

Old axle batch discussion-Most feel that labs should be able to use old batches on the L42-1, assuming torque targets correspond w/scoring, then let each individual lab run to that batch torque target. This topic was left open with no resolution, but will be reopened at a later date once the L42-1 is brought online.

Action Item: All labs to respond to chair with axle QTY and batch

TMC 116 oil matrix

3 labs ran a 3 test matrix on TMC 116 using gear batch 637/604 and TMC presented the data. (on TMC website) TMC 116 performed within the targets of 115.

Motion (Sullivan): Accept TMC 116 data and targets to replace TMC 115 passing reference oil.

2nd: Dale Smith

Yes-6

No-0

Abstain-0

Motion Passes

Motion (Bartlett): Labs quantity of TMC 115 to be frozen and only used for L42-1 at a later date.

2nd: Dale Smith

Yes-5

No-0

Abstain-1

Motion Passes

New Dana ASTM Representative Introduction

Don Kreinbring will be assuming the responsibility of the ASTM representative for Dana. The position was held prior by Ken Okamuro. The ASTM and chairman would like to thank Ken for all of his hard work.

Concerns

- Past L42 (Dana 44) have been lubrified
- Past L42 hardware has been tempered
- ASTM has rejected hardware, only to have new hardware have improper contact pattern
- Manufacturing damage: Grinding out/handling damage
- Over-lapping causing scoring out of manufacturing machine

Expectations from Dana representative

- Follow and monitor progress of current orders
- Communicate order progress/timelines to proper chairperson-the representative needs to be “conduit” between manufacturing plant and ASTM

- Follow-up on manufacturing facilities and drive ASTM needs through order processing, gear machining, gear heat treat, quality control, assembly, etc
- Consistency, Consistency, Consistency

Steps in the right direction/FYI

- High accuracy carriers-allowing for better/easier assembly, and getting the needed contact patterns
- All new batches are required to have a contact pattern analysis, metallurgy analysis and are PPAP'd.
- L42 gear batches need to be assembled to coast side pattern, not drive.