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Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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May 19th, 2015

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ASTM D02.B0.03 L-42 Surveillance Panel Members and Guests:

Attached for your review and comment are the unconfirmed minutes of the:

May 13th, 2015 Surveillance Panel Meeting (Automation Alley – Troy, Michigan)

Please direct any corrections or comments to my attention.

Very Respectfully,

Jarrod Chalkley, Chairman L-42 Surveillance Panel

L-42 Surveillance Panel Meeting Minutes

Automation Alley - Troy, Michigan

May 13th, 2015

Attendees: voting members in **bold**

J. Chalkley (Afton)	R. Banas (XOM)	M. Umerley (Lz)
L. Hamilton (Lz)	B. Dwornick (US Army)	K. Zreik (GM)
R. Warden (SwRI)	J. Gropp (Lz)	N. Aquirre (Intertek)
S. Parke (TMC)	P. Kanga (XOM)	B. Matthews (Afton)
A. Trader (Intertek, Alt.)	M. Keisler (Afton)	

Call to Order

The meeting PowerPoint presentation is attached.

Review of Agenda

The meeting agenda is attached (slide 2 of PowerPoint presentation).

Review of Membership

The sign-in sheet is attached.

Approval of Meeting Minutes

Meeting minutes for November 2014 LRI and February 2015 LRI:

▲ 20141112_SP

20150218_SP

MOTION by Rebecca Warden, 2nd by Matt Umerley to approve minutes. Passed unanimously (verbal).

Minutes covering the two recent L-42 Teleconferences will be submitted at a later date.

Batch C1L925 Update

Batch was approved via teleconference on May 6th, 2015. Please see teleconference minutes for more details.

Concerning the extra (111) axles Dana produced; the labs requested new quotes to be sent out reflecting the actual count per lab \rightarrow LZ-(28), Intertek-(28), Afton-(28) & SwRI-(27).

Some quality concerns were noted; unacceptable pattern, backlash out of spec & indentations on the pinion due to contact from ring/differential during assembly. The labs were asked to document issues and provide serial numbers, pictures, etc.

Dana will be contacted concerning these issues.

Standard Calibration Frequency

Due to the cost of this recent batch and also to make stand calibration more efficient with respect to inventory, a lab suggested an abbreviated calibration sequence if no stand adjustments have been made. Details to this proposal can be seen on slide #6 of the attached presentation.

Comments, questions & suggestions from the group concerning this proposal:

- Add bullet point that requires instrument calibration if needed
- What constitutes "change"? Replacing a failed (but previously calibrated) thermocouple with a new calibrated thermocouple would not be considered a change that required a full calibration sequence
- How are the OEM's going to respond?
- Could potentially have a 6 month old reference, a 3 month old reference and current reference or two 6 month old references and current reference as three run average.
- Wording would be necessary to describe what tests can/can't be used and/or replaced as well as some limit on number of rejected tests.
- Last two paragraphs of the proposal should be removed and replaced with wording that specifies all current requirements be followed plus some iteration of the first sentence.
- Would there be any "cherry picking" of data to benefit lab's pass/fail average and/or abusing of TMC reference oils? Wording would be needed to watch & limit invalidating tests for the benefit of said lab.

The consensus was the proposal needed more detailed language and clarification. Going forward, this change would be written up as an alteration to the current test method specification and include examples of how three test averages & pass/fail lines would be affected; this would be sent out to members for review/comments.

L-42-1 Update

Some initial testing has been completed and shows promise, however more testing is needed before any data will be presented.

New/Open Issues

It was also noted that the axle assembly date is in a different format from historical hardware: Previous \rightarrow Day, Year, Shift (A, B or C). New \rightarrow three-digit Julian Date.

<u>Adjournment</u>

MOTION by Rebecca Warden to adjourn, 2nd by Matt Umerley. Motion passed unanimously (verbal).

Respectfully submitted,

Jarrod Chalkley

L-42 Surveillance Panel Chairman



L-42 Surveillance Panel Meeting

Automation Alley Troy, Michigan May 13, 2015 9:00 AM

Passion for Solutions

Agenda

- Call to Order
- Membership Review
- Meeting Minutes
- Batch C1L925
- Standard Calibration Frequency
- L-42-1 Update
- New/Open Issues
- Adjournment





Approval of Meeting Minutes

Meeting minutes posted to the TMC website

- ▲ 20141112_SP
- ▲ 20150218_SP

Minutes not yet posted

- April 27, 2015 Approving the use of an alternative transmission and necessary universal joint →L-42 Information Letter 15-1
- May 6, 2015 Approving batch C1L925, targets & calibration dates.



Batch C1L925 Update

Ardware was approved via teleconference May 6, 2015.

- ▲ Official approval date will be March 7, 2015
- Current targets & band width as of March 7, 2015 will be kept with correction factors applied to TMC 117 reference oil.
- ▲ Calibration effective May 4, 2015

Quality concerns

- One lab noted issues with two axles
 - Out of spec backlash & pinion indentations
- Going forward, please document any issues.



Extra C1L925 axles

Lugoff has (111) additional axles

- ▲ Three labs would get (28 ea), 4th would get (27).
- If a lab needs a new quote from Dana for PO purposes, please let me know.
- ▲ Invoices will be sent when axles ship; payment Net 30.





Standard Calibration Frequency

When a new reference is required for an L42 test, if the stand is not adjusted in any way that would normally require re-referencing, a single reference test can be performed on the passing oil.

The standard calibration sequence of three consecutive reference tests must be completed if any change is made to a previously referenced test stand, such as:

- moving the stand
- changing axle batches
- changing throttle settings
- changing torque settings
- major computer changes
- a test not conforming to this test method was run in the stand since the last acceptable reference test
- 6 months since last L-42 reference test

If the average Shock Series 1 and Shock Series 2 coast side torque values are within ±15% and ±10% respectively, of the average of the previous three acceptable calibration tests, and the end of test pinion coast side scoring value is within the reference oil targets, the stand will be calibrated. The pass/fail criteria will use the average of the last three calibration tests performed on the test stand.

For Non-reference and discrimination oil tests, the average Shock Series 1 and Shock Series 2 coast side torque values must be within ±15% and ±10% respectively of the average Shock Series 1 and Shock Series 2 coast side torque values from the last three reference tests.



Passion for Solutions.

New/Open Issues



Passion for Solutions.

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