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Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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May 17th, 2012

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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 9th, 2012 Surveillance Panel Meeting (Automation Alley – Troy, MI)

Please direct any corrections or comments to my attention.

Very Respectfully,

Thomas Gottwald, Chairman
L-42 Surveillance Panel

L-42 Surveillance Panel Meeting Minutes

Automation Alley

Troy, MI

May 9, 2012

Attendees: voting members in **bold**

B. Keohler (SwRI)	D. Bell (Afton)	S. Higuchi (Afton)	W. Venhoff (LZ)
D. Smith (Intertek)	J. Gropp (LZ)	T. Boschert (Afton)	A. Trader (Intertek)
S. Parke (TMC)	K. Hobson (Afton)	B. Dwornick (US Army)	T. Muransky (Meritor)
T. Gottwald (Afton/C)	K. Zreik (GM)	S. Eliot (XOM)	C. O'Brien (GM)
B. Kearney (Afton)	L. Hamilton (LZ)	B. McGlone (Meritor)	A. Comfort (US Army)
	P. Kanga (XOM)		

Call to Order

The meeting PowerPoint presentation is attached.

Review of Membership

The sign-in sheet is attached and up-to-date.

Review of Agenda

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

Hardware Update

Pilot Matrix Status (slide 3 of attached PowerPoint presentation)

Review of pilot batch made to entire L-42 Surveillance Panel

- o Participating labs had each received their distribution of pilot axles: Afton – 7, Lubrizol – 6, and SwRI – 7.
- o Each lab to set stand at last batch's settings and try initial pilot axle.
- o Labs would then tune stands and each make 2 runs on pass oil 116-1 and 1 run on failing oil 113.

Afton reported that due to technical problems with their stand (likely the Jordan controller), they had not yet made any pilot batch runs. Planned to work out technical problems and run the week of 5/14/12. If problems persist, will reevaluate and possibly contact Intertek to run pilot axles.

Afton has 7 pilot axles left.

Southwest Research Institute reported concern about this batch. Shocks went as planned however conditioning was not. Conditioning 2 was too mild and doesn't condition coast side properly. Disappointed with drive side scoring after the conditioning period, they felt that this was not stand related because LZ had seen this as well. Polishing had been observed. Heavy scoring was found on both the drive and coast sides after completing shock 2 (currently set at 280 ft-lb). There was also concern that the discrimination oil was not quite severe enough. SwRI stated that they may be able to adjust their stand to compensate for drive side scoring, with an emphasis on adjusting conditioning phases of the test. SwRI has 3 pilot axles remaining.

Lubrizol experienced similar issues with their runs: They observed smooth runs but some drive side scoring. Coast side scoring was acceptable. They noted that the carrier has been very difficult to remove from the housings, post test. LZ also identified a need to possibly lower stand settings. They have not yet run the discrimination oil. LZ has 3 pilot axles left.

DANA Batch Order (slide 4 of attached PowerPoint presentation)

Review of the remaining order indicated that all housings have been delivered to DANA; however the Task Group is awaiting confirmation of the CMM results on these housings. Also, the gear sets are ready to be released to lapping, pending the Task Group's review of the pilot matrix. DANA has also made it clear to the Chairman that they are eager to finish this order.

The Panel discussed actions to follow the pilot matrix. Mr. Koehler identified the need to release final production of rings and pinions as soon as possible. The Panel agreed and stated a need to follow up with DANA's Lou Pappademos for advice to see if any changes can be made to the gear pattern that will correct the drive side scoring issue, but not change coast side.

ACTION: Chairman to set up teleconference with DANA and Task Group for 5/14 or 5/15.

Mr. Boschert brought up the idea to attain the LRI's opinion about the drive side scoring pertaining to this batch of hardware. The Panel agreed that because of the lack of currently approved hardware, and pending DANA's thoughts on the gear pattern, there may be a need for the LRI Committee to amend the test method to allow some percentage of drive side scoring. It was noted that historically similar amendments had been made to the L-37 procedure, for a given batch.

ACTION: Mr. Gropp and Chairman to follow up with the LRI Committee with a presentation to solicit their thoughts about accepting drive side scoring for the current hardware batch order with DANA.

New/Open Issues

Lubrizol expressed concern that they are acquiring a backlog due to accommodating new hardware testing. Needed to know if they should hold for future pilot matrix testing or should they move on with referencing and candidates. Asked if it would be acceptable to reference their stand, change settings mid-reference period to accommodate pilot tests, and then return to candidate testing without re-referencing the stand. LZ stated that they use software for controls.

Motion from Mr. Koehler: Allow a onetime dispensation, per lab, to make adjustments to stand as necessary to gather data on this specific gear/pilot batch, not to exceed four tests. This will be a one-time event within the reference period. After completion of batch specific research runs, allow labs to adjust stands back to reference period settings, without losing reference status on the stand.

Second by Mr. Hamilton.

Discussion: The TMC expressed concern with the ability to tune parameters back in so easily.

Motion passed 6/1/0.

Considering that it is common occurrence for labs to have to make one or more runs in order to adjust settings from the previous calibration period before being able to re-reference the stand, Mr. Parke was doubtful that the labs would be able to successfully restore the pre-hardware run settings after the hardware testing concluded. For this reason, the TMC voted against this motion.

Adjournment

Motion to adjourn. Second. Motion passed 7/0/0.

Respectfully submitted,



Thomas Gottwald

L-42 Surveillance Panel Chairman







L-42 Surveillance Panel Meeting

May 9, 2012
10:00-11:00am

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Agenda

-  **Call to Order**
-  **Membership Review**
 - ▶ Active/voting member review
-  **Hardware Update**
 - ▶ Pilot matrix status
 - ▶ Remaining batch order
-  **New/Open Issues**
-  **Adjournment**



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Hardware Update

Pilot Matrix Status

- ▶ Each lab to make
 - 2 runs on passing oil 116-1
 - 1 run on failing oil 113
- ▶ Labs not required to make matrix runs on referenced stands
- ▶ Each lab to make one run then converse about tuning
 - Still in this phase

Hardware Update

Impressions from initial runs (TMC 116-1)

- ▶ Lubrizol
 - Smooth run, but some drive side scoring. Acceptable coast side scoring. May need to lower stand settings, pending results from other labs.
- ▶ Southwest Research Institute
 - Shocks as planned, conditioning was not. Conditioning 2 too mild, and doesn't condition coast side properly. Ring side scoring after conditioning period. Heavy scoring on both drive and coast sides after shock 2.
- ▶ Afton
 - Chasing problems, most likely with our throttle controller.
 - No run yet.

Hardware Update

Remaining Batch Order

- ▶ Dana waiting to go ahead with gears
- ▶ Carriers have been delivered, however no confirmation of CMM data yet
- ▶ Dana very eager to finish this order
- ▶ Recommendations for batch order:
 - Mfg's backlash and contact pattern notes must be written on axle
 - Pattern – TBD after pilot matrix
 - Other recommendations ?

New and Open Issues?







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Thanks!



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L-42 Surveillance Panel Membership/Attendance
Automation Alley - Troy, MI
May 9, 2012

Initials	Name	Voting Non-Voting	Company Name Company Address	Phone:	Contact information
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	Dale Smith	V	Intertek	Phone:	412-855-6854 dale.smith@intertek.com
	Scott Parke	V	ASTM Test Monitoring Center 6555 Penn Ave Pittsburg, PA 15206	Phone:	412-365-1036 sdp@astmtmc.cmu.edu
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**L-42 Surveillance Panel Membership/Attendance
Automation Alley - Troy, MI
May 9, 2012**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information
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L-42 Surveillance Panel Membership/Attendance
Automation Alley - Troy, MI
May 9, 2012

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
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