

August 15, 2018

Meeting Minutes: Surveillance Panel Meeting August 8, 2018, 9:00 am –9:45 am EDT

See attendance sheet for members in attendance. Additional members joined by Webex: Jeff Milner.

- The L33-1 committee (voting) membership was reviewed
 - Eaton – no replacement has been identified yet
 - SwRI – Replace Rebecca Warden with Mary Stevens
- Meeting minutes from May 2018 ASTM meeting were reviewed. Motion was made by Jule Rucker to approve. Motion was seconded by Arjun Goyal. Motion carried unanimously all voting members present.
- A motion was made during the May ASTM meeting to remove Section A6.2.3 from the procedure and allow unlimited downtime as long as the Validity Calculations still meet the criteria outlined in the procedure for Oil Temperature. However, the Information Letter was not issued to support the change. Angela Trader to follow up and make sure Information Letter is issued.
- There was a lengthy discussion surrounding the proposed change to the rating scale for L33-1 rust rating that was developed during the recent Gear Rating Workshop (see attached).
 - Arjun Goyal suggested we ask all of the rater to rate L33's using both methods for the next few months so we can see what impact this rating change actually makes.
 - Rebecca Warden suggested that the industry needs more information on how this affects candidate oils.
 - Another suggestion was made to ask raters to re-rate tests that had greater than the allowed number of 8s and see if the new scale makes any difference.
 - Dale Smith requested Wes include an overview of this in his ASTM update during the Open LRI meeting.
- Update on next hardware batch order:
 - Finally received a response from Patrick Angst from American Axle (AAM) regarding ordering a new bath of L33 hardware.
 - Was informed that K2XX platform our hardware is based on is no longer in production which means we would have to go through the Aftermarket Department rather than the Prototype Department.
 - Patrick Angst is reviewing the part number and will investigate the possibility of procuring all of the parts (of one batch run) to build another K2XX batch.
 - Patrick Angst suggested it may be easier to move the T1XX platform that is replacing the K2XX family. I let him know that we would have to get details on what the differences between the two families of axles are and that metallurgical changes would be critical to moving forward with the T1XX axle. Benefit with T1XX is that it is currently in production and would be much easier to procure single runs of required parts (cover, castings, housing, etc.)
 - Labs were asked how long their current supply will last: LZ ok for 18 months, SwRI ok for 12 months, IAR ok for 12 months and Afton ok for at least 18 months.
 - Labs were also asked to provide an estimate of the number of axles they would want to order with the new batch.





- Angela Trader will be moving to another position within Intertek. Therefore, she nominated Dale Smith to take over as Chairman for the L33-1 ASTM Surveillance Committee. Wes Vanhoff made the motion to approve the change in Chairmanship. The motion was seconded by John Dharte. Motion carried unanimously.
- Motion was made to adjourn the meeting by Wes Venhoff and seconded by Arjun Goyal and carried unanimously.

Respectfully

Angela Trader
Senior Project Engineer



L33-1 SURVEILLANCE PANEL MEETING

PRI Headquarters - Warrendale, PA

Angela Trader – Senior Project Engineer
August 9, 2018 10:00 am – 10:45 am EDT



AGENDA

01 Call to Order

02 Membership Review

03 Approval of Meeting Minutes

04 Proposed Rating Change

05 Hardware Order

06 New/Open Issues

07 Adjournment



MEMBERSHIP REVIEW



Voting Members:

- Greg Shank – Mack
- Allen Comfort – US Army
- John Dharte – AAM
- Eric Donovan – Afton
- Rob Banas – ExxonMobil
- ?? – Eaton
- Jule Rucker – Meritor
- Dylan Beck – TMC
- Angela Trader – Intertek
- Kristijan Drlja – Lubrizol
- Chintan Ved – Ford
- Rebecca Warden – SwRI
- Khaled Zreik – GM
- Arjun Goyal - BASF

APPROVAL OF MEETING MINUTES

Surveillance Panel Meeting Minutes

- SP Meeting 08FEB2018
 - (20180208 SP.pdf)





GEAR WORKSHOP RECAP

- Scott covered L33-1 severity issues presented by new AAM hardware driving the number of 8's up in known good formulations.
- Suggested that the core problem may lie with the rating scale since the 8 encompasses a wide range on the scale.
- Expressed desire to determine a way to distinguish “Bad 8's” from “Good 8's”.
- A proposed (modified) scale utilizing a 7 was passed around for discussion and was tested later in the workshop.
 - Proposed scale modified results as was desired.
 - Scale was easy to use. Counting 7 or more spots produced an 8, and using the 4mm² template for a Trace/Lt spall from the L37 templates was easy to discriminate larger spots for a “Bad 8” which would now be a 7.
 - Data and scale to be presented at August LRI to gather feedback and gauge interest in pushing and approving use of new scales.
- Discussed possibility of necessity for emergency L33 workshop should this scale be approved.



PROPOSED L33-1 RATING CHANGE

10 = absence of corrosion (same as before)

9 = up to 6 spots, each spot is smaller than 1 mm in diameter (same as before)

8 = 7 or more spots, each spot is smaller than 4 sq mm with the affected area not more than 1% of the rated area (the template for a trace/light spall can be used to determine 4 sq mm).

7 = Any single spot 4 sq mm or greater in area but not more than 1% of the rated area.

5 = over 1% and up to 5% of the rated area (same as before)

0 = greater than 5% (same as before)

Existing Scale:

Rust Levels: 10, 9, 8, 5, or 0 using these definitions:

None	=	10	
Trace	=	9	not more than six spots, each 1 mm diameter or less
Light	=	8	seven (7) or more spots less than 1 mm in diameter or, one (1) or more spots greater than 1 mm in diameter with a combined area of all the spots no greater than 1% of the total rated component surface.
Moderate	=	5	in excess of above and up to 5% of considered surface
Severe	=	0	covering more than 5% of considered surface



HARDWARE BATCH ORDER

- Have been informed that K2XX family of hardware is not in production so will need to work with Aftermarket Department for hardware order.
- Finally contacted by Patrick Angst from the Aftermarket Department. He is investigating part number to determine availability of the components.
- May have to move to the new family of hardware (T1XX) which has changed very little if K2XX hardware is unavailable.
- Need to know how many axles each lab will want to order to provide to AAM

NEW/OPEN ISSUES



Nomination of Dale Smith for L33-1 Chairman

ANGELA TRADER



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intertek

Total Quality. Assured.



COMMITTEE D02 on PETROLEUM PRODUCTS, LIQUID FUELS, AND LUBRICANTS

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- STAFF MANAGER:** Alyson Fick, (610) 832-9710, e-mail: afick@astm.org

Gear Rating Workshop

The Gear Rating Workshop took place at Lubrizol in Wickliffe, Ohio on July 10th through 12th, 2018.

Attendees were:

Joe Beard	Dylan Beck	Jonathan Bolaney	Vanessa DeCapite
Brian Foecking	Matthew Hayden	Brian Kozak	Chris Lonsway
Scott Parke	Greg Price	Jesse Rodriguez	Art Sanchez

Next Workshop: 01/15/2019-01/17/2019, Southwest Research Institute - San Antonio, TX

Tuesday, July 10, 2018

Workshop Began 08:45, set up was completed the day prior. Light meter readings were taken.

Intro covered general safety and building evacuation procedures.

Scott Parke informed that the next Gear Workshop would be held at SWRI January 15-17, and that the July workshop was scheduled for Week following July 4th at Afton in Richmond, VA for 2019.

Scott covered L33 severity issues presented by new AAM hardware driving the number of 8's up in known good formulations.

- Suggested that the core problem may lie with the rating scale in that the 8 on the scale encompasses a wide range on the scale. Expressed desire to determine a way to distinguish "Bad 8's" from "Good 8's".

- A proposed modified scale utilizing a 7 was passed around for discussion and would be tested later in the workshop.

Scott Parke presented the Requirements for Workshop Participation which highlighted requirements for new Raters as well as guidelines for workshop observers and chaperones.

- Presentation is attached

Calibration parts were laid out and calibrations Ratings began around 09:40. Calibration Ratings were completed when we adjourned for Lunch at 11:45.

Calibration data review began 13:00 and was complete by 13:45

Workshop parts were swapped, L42's were overnighed from TMC and ratings began by 14:00 and continued through remainder of day, workshop adjourned 16:30.

Wednesday, July 11, 2018

Workshop began 08:30, Light meter readings were taken.

- L42's received overnight were laid out for rating.

Ratings began at 08:30 and were completed when we adjourned for lunch at 11:30.

Data review began at 13:00 and was complete by 14:30

L33 proposed new scale was discussed.

- Wording for the 7 was modified and L33s were rerated utilizing new scale.
 - o Using proposed scale found several of 8's now became 7's.
 - o Proposed scale was found to be too broad and discussion was had regarding where the new discriminatory boundaries should lie to produce the desired result of discriminating "Bad 8's" from "Good 8's"
- Decision was made to reconvene Thursday at 10:00 to further test the proposed remodified scale.

Workshop adjourned 16:30, majority of rating areas were taken down and boxed leaving only remaining three L33 Rating stations.

Thursday, 7/12/2018

Workshop began 10:00. Light meter readings were taken.

L33 proposed scale was discussed again, including all proposed wording modifications.

- Proposed Scale is attached.

L33s were rerated and ratings continued until we adjourned for lunch at 11:45.

Data review began at 13:00 and results were discussed.

- Proposed scale modified results as was desired.

- Scale was easy to use. Counting 7 or more spots produced an 8, and using the 4mm² template for a Trace/Lt spall from the L37 templates was easy to discriminate larger spots for a “Bad 8” which would now be a 7.

Data and scale to be presented at August LRI to gather feedback and gauge interest in pushing and approving use of new scales.

- Discussed possibility of necessity for emergency L33 workshop should this scale be approved.

Discussed Gleason L37 pinion that was passed around. Shot peened surface shows no grind marks and peened surface gives a rippled appearance when not actually rippled. Encouraged raters to consider that when rating Gleason Hardware.

Workshop adjourned at 14:00, parts were repackaged for shipping. Tables were cleared and lamps were stowed. Art Sanchez thanked Lubrizol for their hospitality in hosting the workshop.

Light Meter readings attached.

07/10/2018	
Table 1	215
Table 2	262
Table 3	228
Table 4	230
Table 5	257
Table 6	323
Table 7	268
Table 8	245
Table 9	227

07/11/2018	
Table 1	226
Table 2	266
Table 3	231
Table 4	217
Table 5	269
Table 6	317
Table 7	220
Table 8	212
Table 9	217

07/12/2018	
Table 1	
Table 2	
Table 3	
Table 4	
Table 5	
Table 6	
Table 7	209
Table 8	216
Table 9	243

Minutes taken by Jonathan Bolaney.

Respectfully submitted,



Arthur Sanchez, Chairman
ASTM Gear Rating Task Force

ASTM GEAR RATING TASKFORCE PANEL MEMBERSHIP

<u>MEMBERS</u>	<u>COMPANY</u>
Aguirre, Nancy	Intertek
Adams, Pat	Afton
Barrera, Tony	Intertek
Bolaney, Jonathan	Lubrizol
DeCapite, Vanessa	Lubrizol
Dominguez, Lucio	Intertek
Foecking, Brian	Lubrizol
Kozak, Brian	Afton
Lopez, Frank	SwRI
Lonsway, Chris	Lubrizol
Rodriguez, Jesse	Intertek
Sanchez, Art <i>Ldr</i>	SwRI
Trevino, Bobby	SwRI

<u>MAILING DISTRIBUTION</u>	<u>COMPANY</u>
Beck, Dylan	TMC
Bell, Don	Afton
Gottwald, Thomas	Afton
Koehler, Brian	SwRI
Parke, Scott	TMC
Smith, Dale	Intertek PARC
Trader, Angela	Intertek
Venhoff, Wes	Lubrizol
Warden, Rebecca	SwRI

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Presentation to July 2018
Gear Rating Workshop
Lubrizol Corporation, Wickliffe, OH

Requirements for Workshop Participation



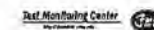
Deposit (Piston) Rating Workshop

- Industry workshop
 - Originally conducted by CRC, then SAE, currently TMC
 - Held semi-annually
 - Originally open to novice and experienced raters and general interest observers
 - Originally general, non-test-specific rating techniques
 - Originally included some training
 - Attendance mandated by some surveillance panels



Distress (Gear) Rating Workshop ...also bearings and seals

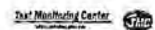
- Industry workshop
 - Originally conducted by CRC
 - Originally open to novice and experienced raters and general interest observers
 - Originally included some training
 - Held: as interest dictates



Distress (Gear) Rating Workshop

Problem: "as interest dictates"

- Gear surveillance panels have a need to reliably be able to calibrate/qualify their raters



Distress (Gear) Rating Workshop

- Solution: Current Gear Workshop
 - Surveillance panel-sponsored
 - Conducted by TMC
 - Held semi-annually
 - Test-area specific rating techniques
 - Hosted by currently active test labs
 - Open only to raters rating in those participating labs



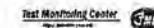
Distress (Gear) Rating Workshop

- Who can attend?
 - Raters from participating labs
 - Undergone in-house (or contract) training alongside a calibrated rater
 - Submit a work resume to TMC for review



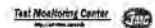
Distress (Gear) Rating Workshop

- What then?
 - Rater can attend workshop
 - After attending 2 consecutive workshops, rater may request RC parts
 - If not successful with RC parts, rater must attend another workshop before requesting additional RC parts



Distress (Gear) Rating Workshop

- So then rater is calibrated?
 - Yes.
 - Rater is calibrated for 3 months
 - Rater is eligible for 6 month cal on first RC calibration completed one year after first successful RC



Distress (Gear) Rating Workshop

- Who else can attend the workshop?
 - Only raters from participating labs
 - Sole exception: LRI reviewers
- All others are expected to attend the Industry workshop held "when interest dictates"



Distress (Gear) Rating Workshop

- What about engineers or special cases?
 - In certain, limited cases observers are permitted under the following conditions:
 - Observer must register for workshop and pay registration fee.
 - Observer must be accompanied by a chaperone.



Distress (Gear) Rating Workshop

- What are the chaperone requirements?
 - Chaperone must have attended a workshop within the past 24 months.
 - Chaperone must have been a calibrated rater within the past 24 months.
 - Chaperone must register for workshop and pay registration fee.
 - Chaperone is not considered a workshop participant for test procedure calibration purposes.



Distress (Gear) Rating Workshop

- What are the chaperone requirements (cont.)?
 - A single chaperone may accompany a second observer if:
 - Both observers work closely together with the same company at the same physical location and have a pre-existing working relationship.
 - The workshop can accommodate a maximum of 3 observers and their attendant chaperones.



LAB 7-10-18

LZ Brian Fochung

AFTON Matthew Blake

INTERTEK Mike

LZ Vance DeLoach

AFTON Brian Kosak

AFTON Greg Price

SURFI Arthur Sanchez

LZ [Signature]

AFTON [Signature] JOE BEARD

LZ Chris Loring

7-11-18 Workshop

LAB SIGN-IN

LZ Brian Foedez

LZ Christopher

SWAI Anthony Smith

INTERTEK - IMP

AFTON Brian Koerk

AFTON Matthew Plough





AFTON SOLE BOARD

AFTON G. Price





LZ Vanessa DeCarita

LZ [Signature]




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August 9, 2018

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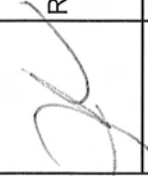

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*Note
New Address
& Phone #*




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	Ved, Chintan	V	Ford Transmission and Driveline 35500 Plymouth Rd Livonia, MI, 48150	Phone: 313-805-9495 Fax: 734-523-3960 E-mail: cved@ford.com
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