



5404 Bandera Road  
San Antonio, Texas 78238

Telephone: +1 (210) 684-2310  
Facsimile: +1 (210) 684-6074  
[www.intertek.com](http://www.intertek.com)

Meeting Minutes: Surveillance Panel Meeting August 13, 2014, 10:00am – 11:00 am EST

Members present:

Alison Athey, Mack  
Don Bell, Afton  
Jarrod Chalkley, Afton  
John Dharte, AAM  
Jerry Gropp, Lubrizol  
Larry Hamilton, Lubrizol  
Kevin Hobson, Afton  
Chris Pregelman, Lubrizol  
Scott Parke, TMC  
Dale Smith, Intertek  
Matt Umerly, Lubrizol  
Rebecca Warden, SwRI  
Khaled Zreik, GM  
Rob Banas, ExxonMobil

- The L33 committee membership was reviewed. Jay Chalkley will replace Thomas Gottwald as voting member for Afton. Donna Mosher will replace Thelma Marougy as voting member for Eaton.
- Meeting minutes from Surveillance Panel meeting in May 2014 were reviewed. Motion was made by Jarrod Chalkley to approve. Motion was seconded by Matt Umerly. Motion carried unanimously.
- Data was presented for pilot batch testing using American Axle (AAM) K2XX hardware. A brief discussion followed. The group felt that the results were favorable and that the K2XX appears to be a suitable replacement axle for the Dana model 30 currently used. Some minor challenges for build-up were discussed.
- Rebecca Warden explained that SwRI had some difficulties achieving the correct break and turn for the reassembled axles and suggested we open up the specification tolerance to be more forgiving with this axle. During further discussion, Dale Smith suggested that we ask AAM to build these axles to test specification initially to eliminate the need to carry a large inventory of shims and to make it easier to meet the target break and turning torques. Angela Trader volunteered to contact AAM to ask if this was possible, especially since these axles would be made in the prototype facility.
- The group reiterated that this would be a two year order, to last through 2016.
- The labs were asked to have quantity order numbers for a September 1 conference call.
- Angela Trader was requested to contact AAM and ask about break and turn specs and to get an assembly list to review.
- A brief discussion regarding re-distribution of current test hardware followed. The topic was tables for a later meeting pending delivery dates from AAM for new hardware.
- Angela Trader asked if this could be implemented as simply a hardware change within the same procedure. Jerry Gropp suggested that the changes for this axle are substantial enough to warrant a new D number and a new procedure (L33-2).
- Motion was made to adjourn the meeting by John Dharte and seconded by Jarrod Chalkley. Motion carried unanimously

# L33 Surveillance Panel Meeting

PRI  
Warrendale, PA  
August 13, 2014  
10:00am – 11:00am



# Agenda



Valued Quality. Delivered.

- Call to Order
- Membership Review
- Approval of Meeting Minutes
- Pilot Batch Test Results
- Batch Order Update
- New/Open Issues
- Adjournment

# Membership Review



Valued Quality. Delivered.

## Voting Members:

- Tom Bryson – Mack
- Allen Comfort – US Army
- John Dharte – AAM
- Thomas Gottwald – Afton
- Percy Kanga – ExxonMobil
- Thelma Marougy – Eaton
- Bruce McGlone – Meritor
- Scott Parke – TMC
- Angela Trader - Intertek
- Matt Umerly – Lubrizol
- Chintan Ved – Ford
- Rebecca Warden – SwRI
- Jack Zakarain – Chevron
- Khaled Zreik – GM

Any changes?

# Approval of Meeting Minutes



Valued Quality. Delivered.

## ➤ SP Meeting Minutes

- “20140212\_sp” – February 11, 2014, Warrendale, PA

# Pilot Batch Test Results



Valued Quality. Delivered.

TMC Oil Code	Rating Location										Final Rust	
	1	2	3	4	5	6	7	8	9	10		
155-1	10	10	9	10	10	9	10	10	10	10	10	9.8
155-1	10	8	8	10	10	10	10	10	10	10	10	9.4
155-1	10	10	8	10	10	10	10	10	10	10	10	9.8
123-2	8	8	8	8	8	8	9	10	8	8	8	8.2
123-2	10	8	8	8	8	8	8	8	8	8	8	8.2
123-2	8	8	8	8	8	8	9	9	8	8	8	8.3

## Current Targets

155-1 Mean: 9.580      Std. Dev.: 0.250

123-2 Mean: 8.740      Std. Dev.: 0.260

# AAM K2XX Hardware Batch



Valued Quality. Delivered.

- AAM can hold pricing from matrix batch - \$802.69 each
- Would be built in prototype facility in Auburn Hills, MI
- Initial lead time of 12 weeks
- 45-50 axles shipped per week thereafter
- Working on materials list with build details and drawings
  - Rust inhibitor
  - No locktite on threads
  - No lubrite
  - ASTM part number?

# AAM Hardware Issues Uncovered



Valued Quality. Delivered.

## Build issues:

- Obtaining historic complete assembly break and turn
- Need to reuse crush collar
- Current tools have limitations
- Larger axle takes longer to blast

## Test Issues:

- Warm up times (IAR AAM ~ 29 min; IAR v01.1 ~ 34 min)
- Motor Capacity

## EOT Issues:

- Disassembly when hot



## Large batch order

- How many do the labs want? 1 year order? 2 year order?
- When are we ready to place an order?

## Testing commercial formulations

- How many?
- Timing?

## Matrix testing for batch approval

- 3 labs participating
- 2 TMC oils (155-1 and 123-2)

## New/Open Issues



Valued Quality. Delivered.

Anything new to add?

Intertek

*Thank You!*