Report of Meeting
L-60-1 Surveillance Panel Conference Call
August 10th, 2022

Attendees:

SwRI -	**Mueller,** Kostan, Charron
Lubrizol -	Venhoff, **Slocum**, Schaup
Afton -	**Sangpeal,** Bell, Horvath
Intertek -	**Lange**
TMC -	**Beck**
ExxonMobil -	**Banas**
BASF -	**Goyal,** Mosher, Caridi
Dana -	**Zyski**
Meritor -	LaBond, **Carter**
Army -	Sattler
AAM -	**Muransky**
Shell -	Uy
Chevron -	Warden
Daimler -	Neal

Voting Members in **BOLD**

1.0 Membership Review

- Remove Mike Cabaj

2.0 Meeting minutes Approval

– May 11th, 2022, ASTM Meeting #205

Motion #1 → R. Slocum 1st /2nd M. Sangpeal to approve the meeting minutes from the May 11th, 2022, ASTM Meeting. Motion passed unanimously, 10-0-0 (Yes-No-Abstain).

3.0 L-60-1 Severity Task Force Follow-up

- Labs will run same bar stock, same reference oil (148), and gears prepped by Afton
- Upon shipment to labs gears will be coated in reference oil, wrapped in Nox Rust paper, and put in plastic bag
- TMC will send labs fresh reference oil samples
- Aim to run mid-September
- LZ/Intertek still need to generate PO's to Prosimalys for gear analysis possibly complete end of September
    - When complete follow-up presentation from Prosimalys and the severity task force
- Intertek to upload reference data sets
    - Todd Dvorak was going to look at data but no longer available but will involve Travis

4.0 Sec. 6.1.8.2 venturi flow meter calibration

Motion #2 → A. Lange 1st /2nd W. Venhoff to approve the change to Sec. 6.1.8.2 from D5704-20 to the following –

6.1.8.2 **Send the Preso Low Loss Venturi Meter together with the Dwyer digital manometer to the specified calibration laboratory[16] or any ISO/IEC 17025 accredited laboratory for cleaning and calibration at least once a year.**

Motion passed unanimously, 10-0-0 (Yes-No-Abstain).

Action Items:

- R. Slocum to investigate into addressing or removing "Sole Source Suppliers" instances in D5704

5.0 Adjourn

Motion #3 → T. Muransky 1st /2nd A. Lange to adjourn. Motion passed unanimously, 10-0-0 (Yes-No-Abstain).

Respectfully submitted,

Robert Slocum
L-60-1 Surveillance Panel Chairman

D02.B0.03

L-60-1 Surveillance Panel Meeting

8/10/2022

14:00 pm– 15:00 pm

Robert Slocum

Agenda

- Call to Order/Agenda review
- Membership review
- Meeting Minute Approvals
  - May 11th, 2022, ASTM Meeting
- L-60-1 Severity Task Force Follow-up
  - 4 lab run
  - Gear analysis
  - TMC data upload
- Sec. 6.1.8.2 venturi flow meter calibration
  - Other Calibration Labs?
- Old Business
- New business
- Adjournment

Membership Review

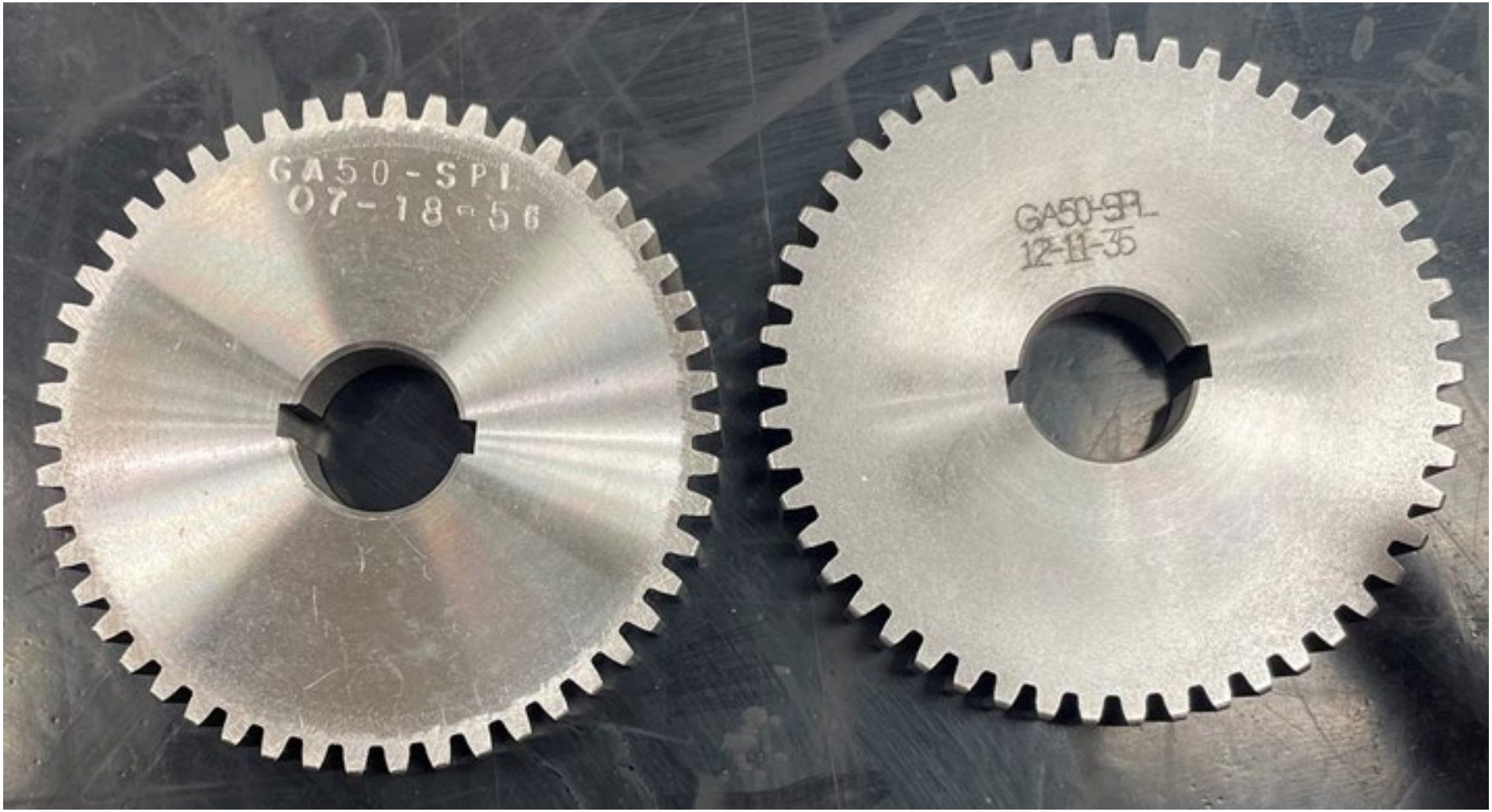
Allen Comfort	US Army
Amy Zyski	Dana
Arjun Goyal	BASF
Anthony Lange	Intertek
Jason W. Carter	Meritor
Dylan Beck	TMC
Robert Slocum	Lubrizol
Matt Sangpeal	Afton
Mike Cabaj	Linamar
Caroline Mueller	SwRI
Rob Banas	ExxonMobil
Troy Muransky	AAM

Meeting Minutes Approval

- May 11th, 2022, ASTM Meeting

L-60-1 Severity Task Force Follow-up

- 4 lab run
  - Stands available and timing?
- Metal analysis
  - PO's??
- TMC lab reference data upload


GA50-SPL
07-18-56
GA50-SPL
12-11-35

– Borderline Oil Data

Stand	Run #	Oil	Small Gear Batch	Large Gear Batch	AVG C/V w/CF	Lg Gr Avg	Lg Gr F	Lg Gr R	Sm Gr F
4F	378	GO-013357-07-00	12-11-11	12-11-45	6.80	6.20	6.00	6.40	6.50
4F	386	GO-013357-07-02	07-18-30	06-18-47	5.40	4.80	4.70	5.00	5.61
5F	435	GO-013357-07-01	12-11-05	12-11-36	6.40	5.80	5.40	6.11	3.34
5F	440	GO-013357-07-02	07-18-30	07-18-47	5.60	5.00	4.75	5.30	0.98
16	228	GO-013357-07-01	06-18-22	05-18-60	7.60	7.00	6.90	7.05	6.95
16	233	GO-013357-07-02	06-18-22	05-18-65	7.30	6.70	6.85	6.50	6.40
16	239	GO-013357-07-02	12-11-07	12-11-45	*7.1	6.50	6.80	6.25	6.41
					*S.A. Removed				

L-60-1 Severity Initial Summary

Executive Summary

Average Carbon/Varnish

- Reference oil data historically has been consistently severe of target.
- Though initial testing on 2018 hardware was closer to target, all labs who have switched have seen a shift, and the one lab that hasn't has remained stable, therefore indicating a high likelihood of the new gear batch as the cause of the shift.
- Both reference oils have shifted similarly, providing evidence that candidate behavior is likely also shifted.
- Options:
  1. Correction factor 0.6 merits is recommended for a tests run with the 2018 hardware, in addition to the 0.6 merit correction currently in place, for a total correction of 1.2 merits for tests run on the 2018 hardware.
  2. There are clear differences in precision of ACV across labs, with Lab D running much more precise than other labs. Lab visits are recommended to better understand these differences.
     - Updates to the ACV correction factor may be delayed - pending the findings / conclusions of the lab visits
  3. Do nothing

Average Sludge

- Only 3 data points beyond 2.0 sigma severe, and there is no clear shift at the time of the new hardware introduction.
- It is recommended to continue to monitor this parameter without a correction factor and allow severity adjustments to handle differences in severity.

- Sec. 6.1.8.2 venturi flow meter calibration

6.1.8.2 Send the Preso Low Loss Venturi Meter together with the Dwyer digital manometer to the specified calibration laboratory[16] for cleaning and calibration at least once a year.

(16) Bowser-Morner, 4518 Taylorsville Rd.,
Dayton, OH 45424.

6.1.8.2 Send the Preso Low Loss Venturi Meter together with the Dwyer digital manometer to the specified calibration laboratory[16] or any ISO/IEC 17025 accredited laboratory for cleaning and calibration at least once a year.

Old Business

New Business

Adjournment