Report of Meeting
L-60-1 Surveillance Panel Conference Call
May 12th, 2021

Attendees:

SwRI -	**Warden,** Kostan
Lubrizol -	Venhoff, Slocum, **Drjla**, Bealko, Manouchehri
Afton -	**Sangpeal,** Bell
Intertek -	**Lange**, Smith, Chadwick
TMC -	**Beck**
ExxonMobil -	**Banas,** Kanga
BASF -	**Goyal,** Mosher
Dana -	**Zyski**
Meritor -	LaBond, **Carter**
Army -	**Comfort**
AAM -	**Muransky**
Oronite –	Martinez

Voting Members in **BOLD**

1.0 Membership Review

Motion #1 → W. Venhoff 1st /2nd R. Warden to approve the voting member and L-60-1 Surveillance Panel Chair change from Kristijan Drjla to Robert Slocum. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

2.0 Meeting minutes Approval

- February 10th, 2021 (LRI# 200)
- April 29th, 2021 Conf Call

Motion #2 → J. Carter 1st /2nd W. Venhoff to approve the meeting minutes from the February 10th, 2021 (LRI# 200) and April 29th, 2021 Conf Call. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

3.0 L60 Stand Drawings Approval

- Test procedure will need updated. Will work with TMC on edits. Possibly address via an email vote or at least the August LRI.

Motion #3 → W. Venhoff 1st /2nd R. Warden to approve that TMC will now house the official L-60-1 stand drawings instead of ASTM. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

4.0 Test Report Packet Revision Proposal

- Will table for later and will align with L33
- Labs to discuss with raters on current rotation of workshops

5.0 TMC155-2 qualification matrix

- 3 of 4 data points
- Will hold off for additional data

6.0 Replacement of 148-1

- Roughly 2-year supply not able to re-blend this oil
- Comment on in favor of better differentiation between ACV and sludge
- If any lab interested in formulating a replacement- WVE to look internally if any interest in supplying a candidate

7.0 L-60-1 Severity ACV

- Travis sent out initial discussion but currently working on L-37-1 target investigation
- 1st step in next week or so
    - What is the right data set
    - Any volunteers to help understand and advise the history of reference oil have changed?
        - Wes, Allen Comfort, Rob S….
    - Martin - What variables or data impact
        - Any non-charted data info runs, etc,..

8.0 Test Hardware Prints

- Action item: Lubrizol
    - Look for Alloy Certs
    - Search for Jerry Gropp files on material specifics

9.0 Adjourn

Motion #4 → R. Warden 1st /2nd A. Goyal to adjourn. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

Respectfully submitted,

Robert Slocum
L-60-1 Surveillance Panel Chairman

D02.B0.03

L-60-1 Surveillance Panel Meeting

05/12/2021

3:00pm– 4:00pm

Kristijan Drlja / Robert Slocum

Agenda

- Call to Order/Agenda review
- Membership review
- Meeting Minute Approvals
  - February 10th, 2021, ASTM Meeting
  - Conference Call April 29th, 2021
- Test Report Packet Revision
- TMC155-2 qualification matrix
- L60 Stand Drawings Approval
- Replacement of 148-1
- L-60-1 Severity ACV
- Test Hardware Prints
- New business
- Adjournment

Membership Review

L-60-1 Surveillance Voting Members

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

Meeting Minutes Approval

- February 10th, 2021, ASTM Meeting
- Conference Call April 29th, 2021

Test Report Packet Revision Proposal

- Last Workshop Attended Date

Test Method D5704
(L-60-1)
Form 5

Gear Rating

Lab:	Stand:	Stand Run:
Oil Code:	Rated By:	**Last Workshop Attended:**

Carbon/Varnish:

Large Gear				Small Gear			
Front		Rear		Front		Rear	

TMC155-2 Qualification Matrix

L-60-1: 155-2 Reference Oil Approval

- During the February 2021 meeting, the test labs agreed to each run one test each on the new 155-2 oil re-blend
- 3 out of 4 of the labs were able to conduct the 155-2 test

TMC155-2 Qualification Matrix

L-60-1: 155-2 Reference Oil Approval

testkey	ltmslab	val	ind	ltmsdate	ASL	ACV	TOL	PEN	VISI	RGEARBAT
162504-L601	D	NI	155-2	20210307	9.5	9	0.9	1.4	22	12-11-43
162501-L601	A	NI	155-2	20210228	9.5	9.2	0.9	1.3	25	06-18-66
162498-L601	B	NI	155-2	20210228	9.3	8	1.3	1.4	25	06-18-52
				AVG.	9.433	8.733	1.033	1.367	24	
				STD.	0.115	0.643	0.231	0.058	1.732	
			155-1	AVG.	9.426	8.76	1.109	1.509	28.8	N Size = 35
			Targets	STD.	0.101	0.586	0.53	0.434	3.669	

L60 Stand Drawings Approval

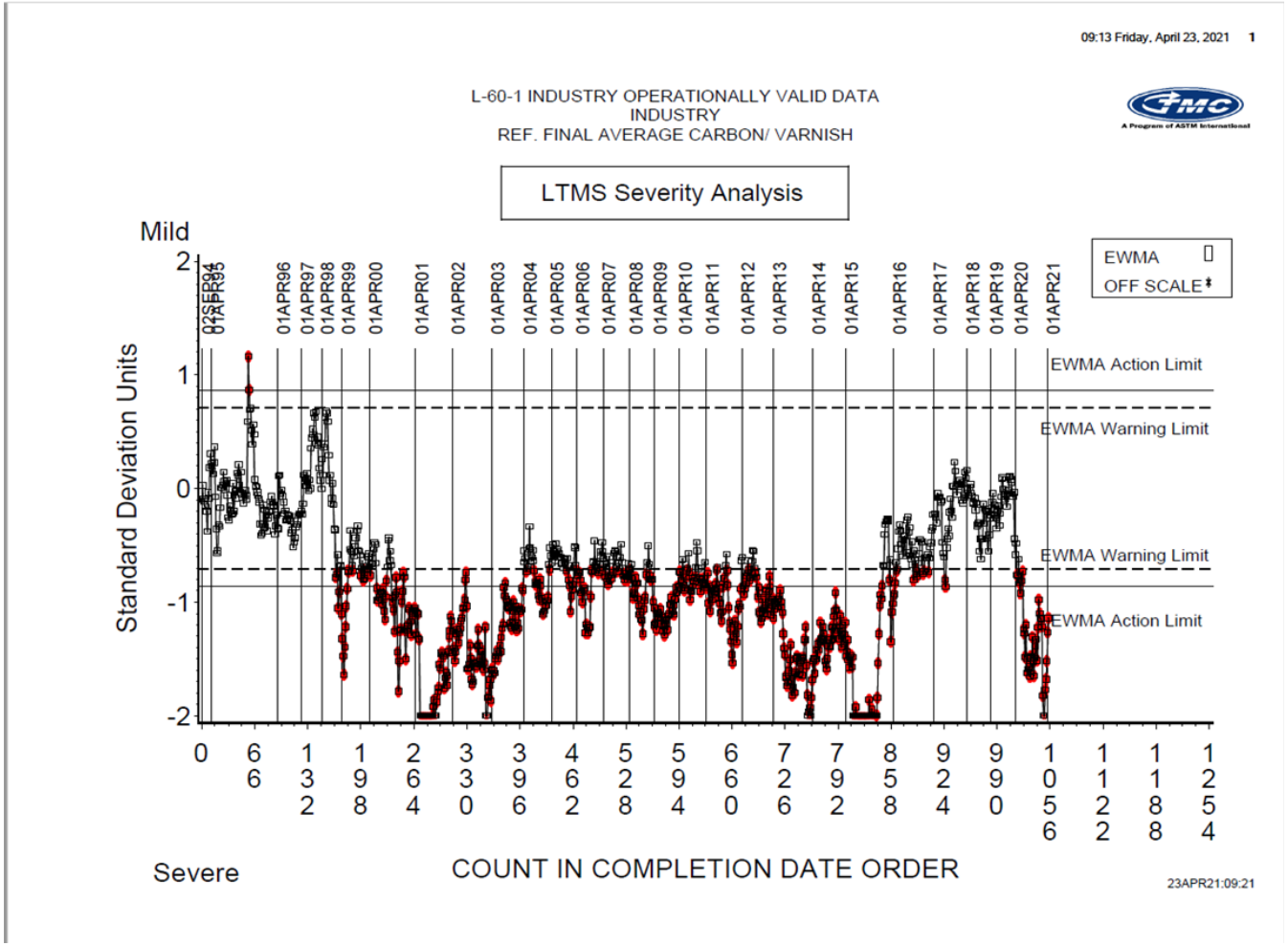
- LZ went through 3 sets of drawings
  - Intertek, LZ, and ASTM: ADJD5704A
- Intertek had two out of date prints
- LZ prints matched ASTM
- Drawings possibly be governed by TMC??

Replacement of 148-1

- ?

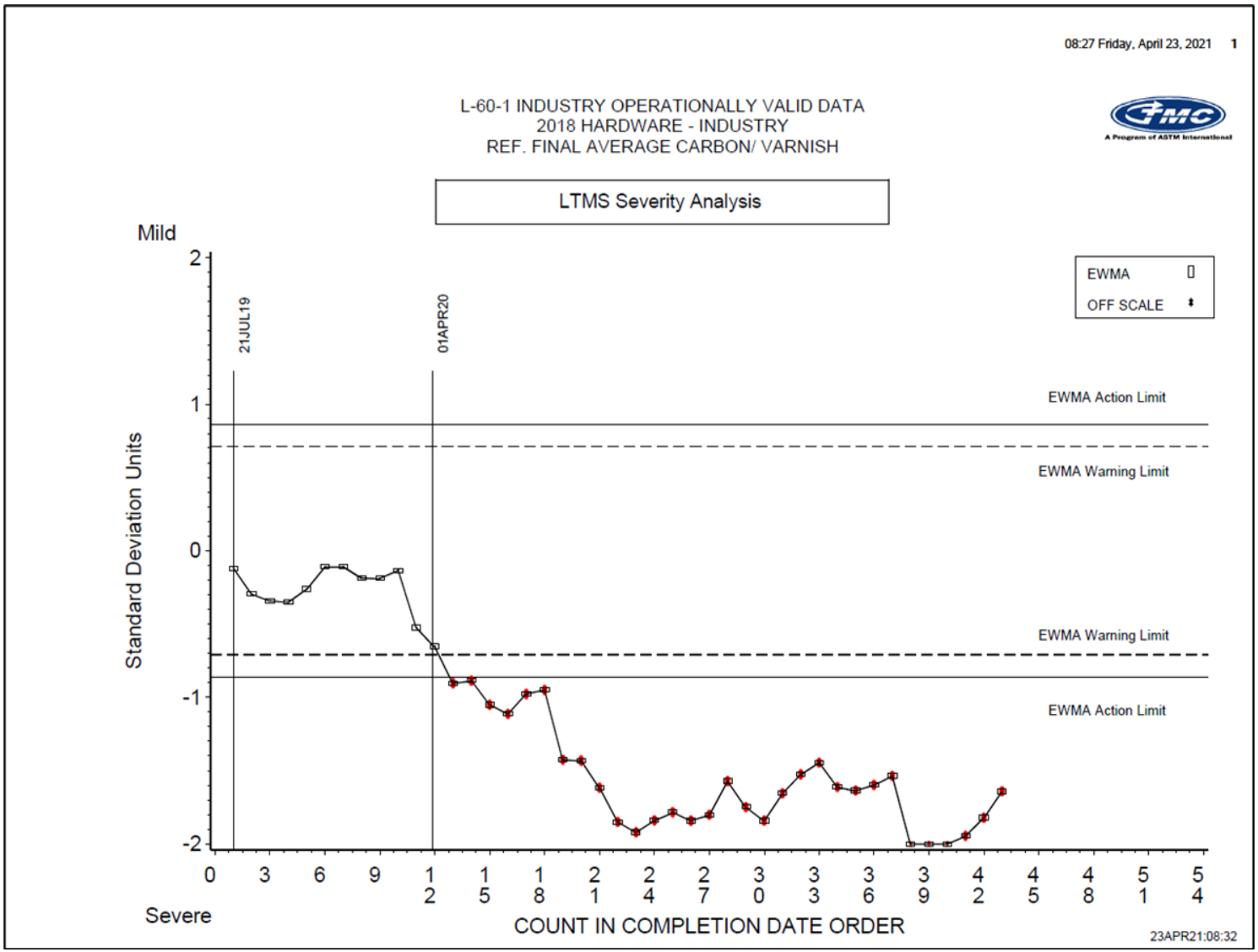
L-60-1 Severity ACV

- Next steps
- Industry statisticians to possibly investigate shift
- Possible runs on 12-11 hardware?



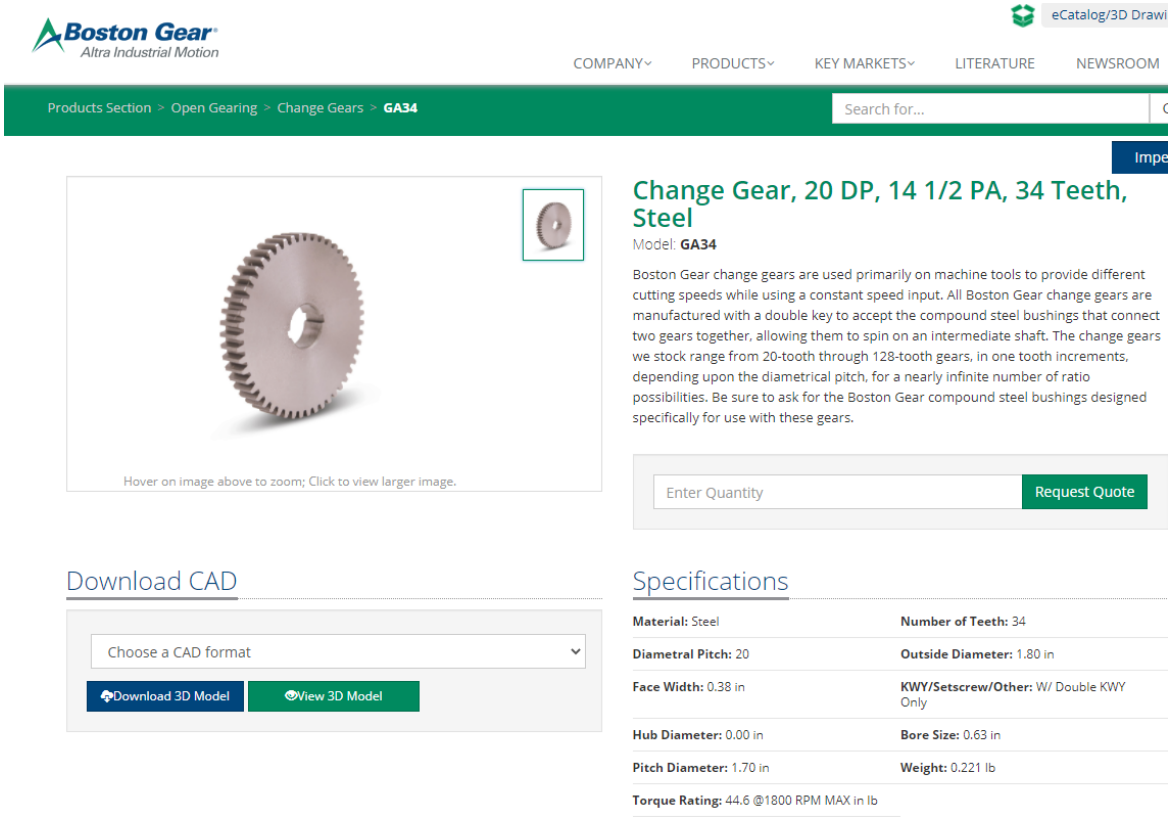
L-60-1 Severity ACV

- 2018 hardware



Test Hardware Prints

- LZ contacted Ohio Gear and Transmission with no luck on prints from them
- Will try and contact Boston Gear



New Business / Adjournment