

Report of Meeting
L-37-1 Surveillance Panel Conference Call
November 9th, 2022

Attendees:

SwRI -	Mueller , Kostan, Charron
Lubrizol -	Venhoff, Slocum , Schaup, Drjla, Ariemma
Afton -	Sangpeal , Bell, Horvath, Decker
Intertek -	Lange ,
TMC -	Beck
ExxonMobil -	Banas
BASF -	Goyal , Caridi
Dana -	Zyski
Cummins-Meritor -	LaBond, Carter
Army -	Sattler, Comfort
AAM -	Muransky , Zarins
Shell -	Uy
Navistar -	Morris
Daimler -	Neal
Fuchs -	Bender, Yucebilgic

Voting Members in **BOLD**

1.0 Membership Review

Motion #2 → R. Slocum 1st /2nd A. Goyal to approve the change of Nick Schaup to take the place of Robert Slocum as the L37-1 Surveillance Panel chair and voting member. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

2.0 Meeting minutes Approval

– August 10th, 2022, ASTM Meeting #206

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

3.0 L-37-1 LTMS Discussion

- Borderline Gear rating done at LZ (See Appended PowerPoint)
- Will send gear set to Afton 1st to start a round robin for all raters to rate for comparison
- Need more Gleason gears in the rater calibration parts

4.0 MnP Coated batch approval process

- Afton, SwRI – complete
- Intertek - Soon

5.0 Gleason Match # issue

- Email vote completed to engrave ring gear with pinion # if mismatched
- Need to keep trying to contact Gleason to discuss some concerns on final processing/ Pinion tip relief.
- Need to find Second Source for future hardware

6.0 Reference Oil Targets – Canadian

- Dylan had spreadsheet to determine which data points to include/exclude

7.0 Old Business

8.0 New Business

9.0 Adjourn

Motion #3 → A. Goyal 1st /2nd J. Carter to adjourn. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

Respectfully submitted,



Robert Slocum

L-37-1 Surveillance Panel Chairman



D02.B0.03

L-37-1 Surveillance Panel Meeting

11/09/2022

16:00 pm – 17:00 pm

Robert Slocum

- Call to Order/Agenda review
- Meeting Minute Approvals
- August 10th, 2022, ASTM Meeting
- L-37-1 LTMS Discussion
 - Borderline Gear rating done at LZ
- MnP Coated batch approval process
 - Labs progress??
- Gleason Match # issue.
 - Any other discussion or thoughts??
- Reference Oil Targets - Canadian
- Membership Review
- Old Business
 - ?
- New business
- Adjournment

Meeting Minutes Approval

- August 10th , 2022, ASTM Meeting



A Program of ASTM International

Test Monitoring Center

<http://astmtmc.cmu.edu>

<http://astmtmc.org>

LRI 207 Surveillance Panel Meetings L-37-1 Rating Activity

November 9, 2022

Overview

- During the August panel meeting, there was discussion about Lab B potentially be consistently milder than other labs for RIPP.
- As an investigation a L-37-1 reference test that failed for RIPP at Lab A was sent to lab B to be rated



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

Rating Comparison

Pinion Rating (Run#05-0329)				
Rater ID	Lab	WEAR	RIDG	RIPP
43	LZ	8	10	9
44	LZ	8	10	8
* New Rater in Training	LZ	8	10	10
38	SR	7	9	6

Lab B did rate the parts milder than the original rating at Lab A



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

Next Steps

- This activity showed that Lab B was more mild than Lab A for at least one part
- Possible next steps:
 - Take this part to the next gear rating workshop
 - Have other Lab A raters look at this part
 - Repeat this activity with more L-37-1 parts



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

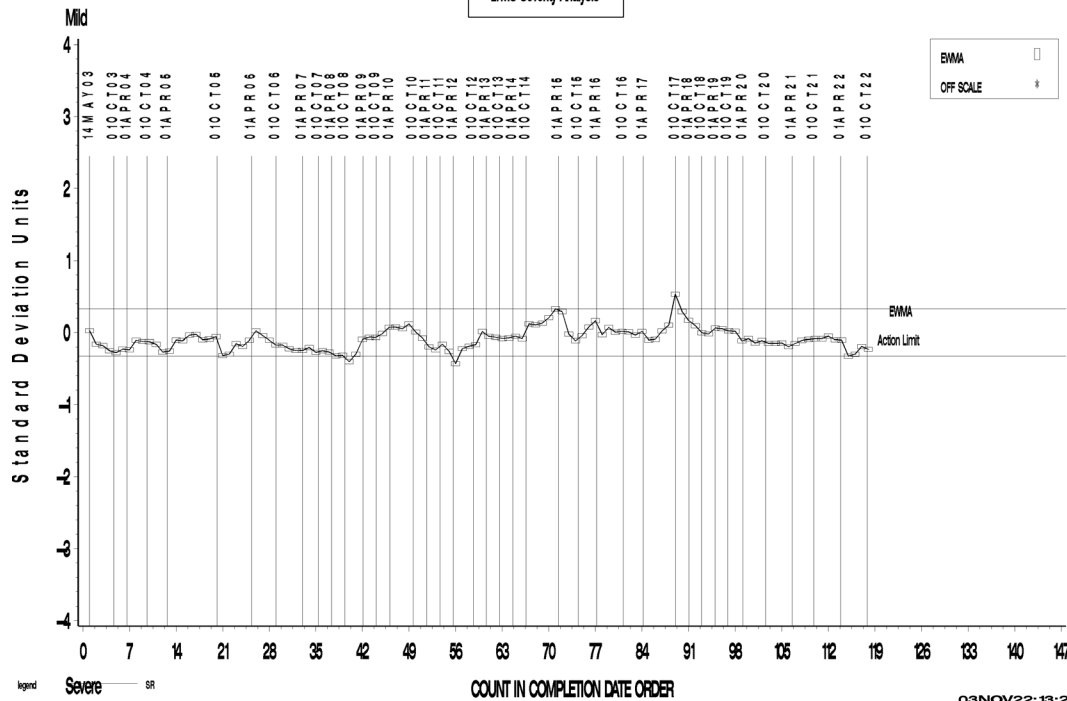
Lab A -RIPP

L-37 RATER CALIBRATION LABORATORY OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:27



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

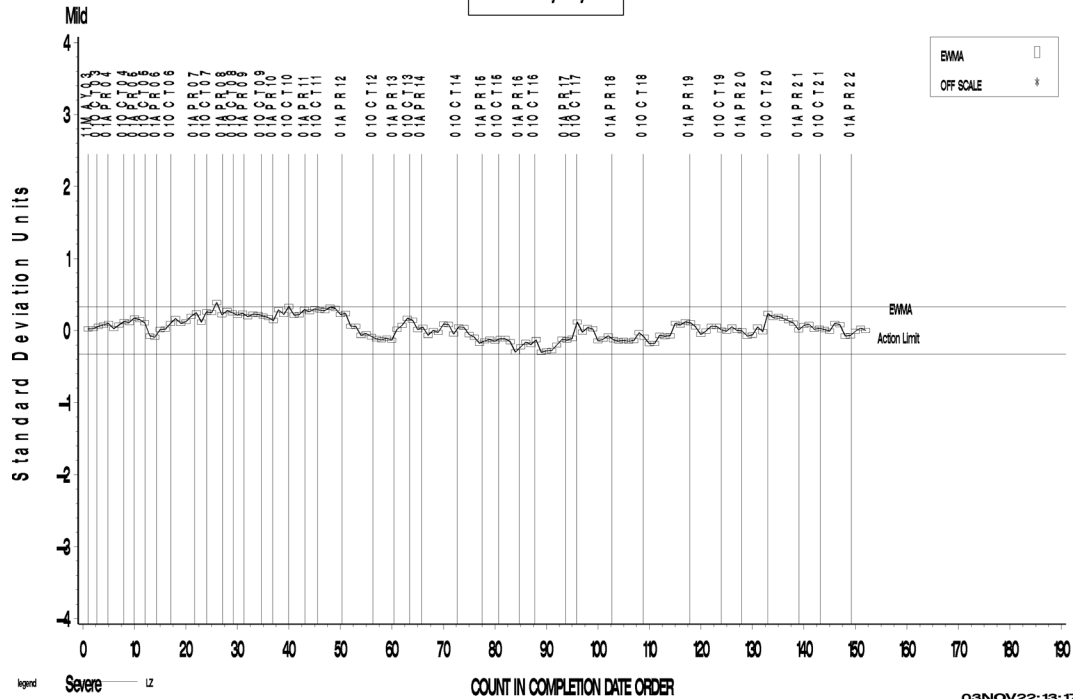
Lab B -RIPP

L-37 RATER CALIBRATION LABORATORY OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22: 13:17

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

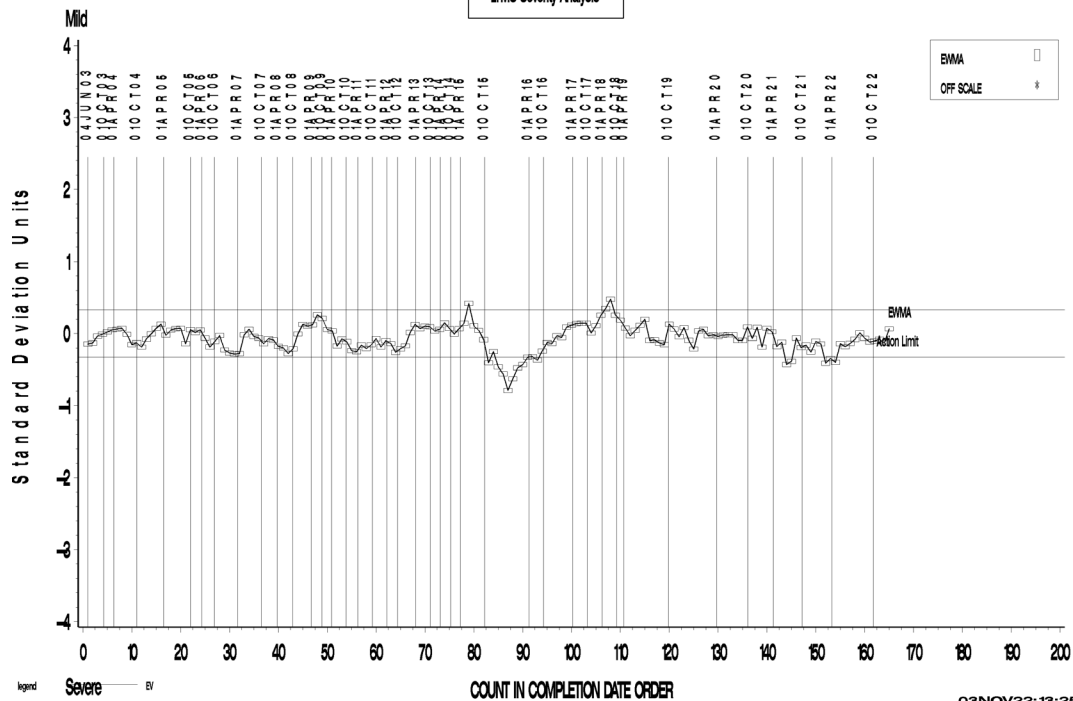
Lab D -RIPP

L-37 RATER CALIBRATION LABORATORY OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:25



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

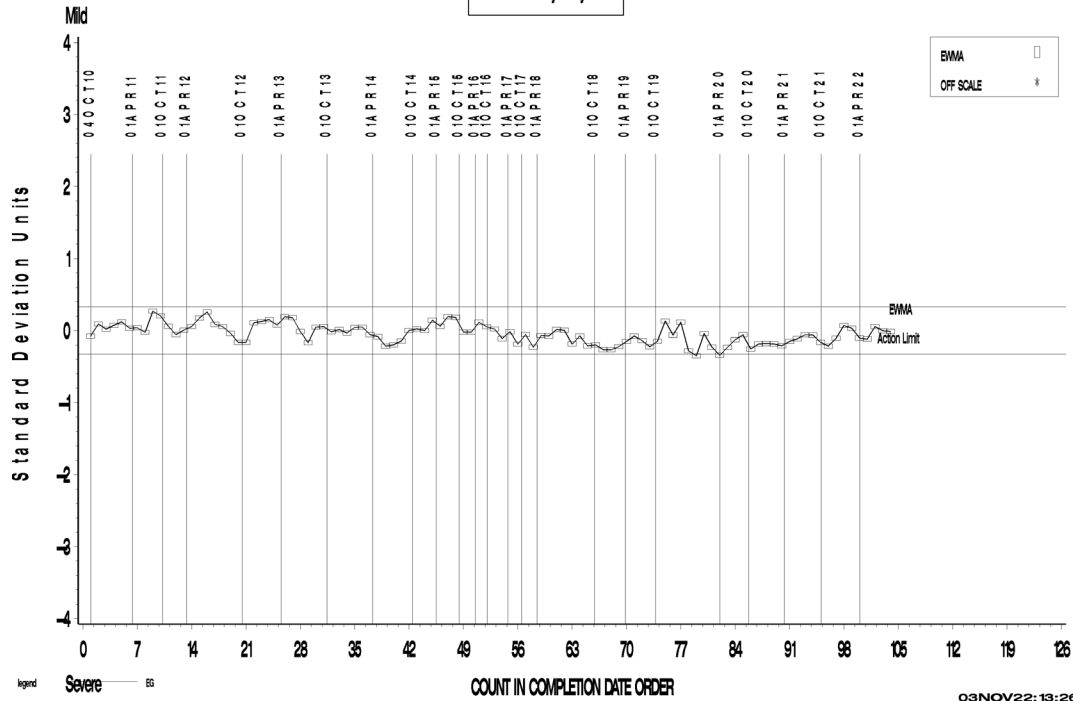
Lab G -RIPP

L-37 RATER CALIBRATION LABORATORY OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:26



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

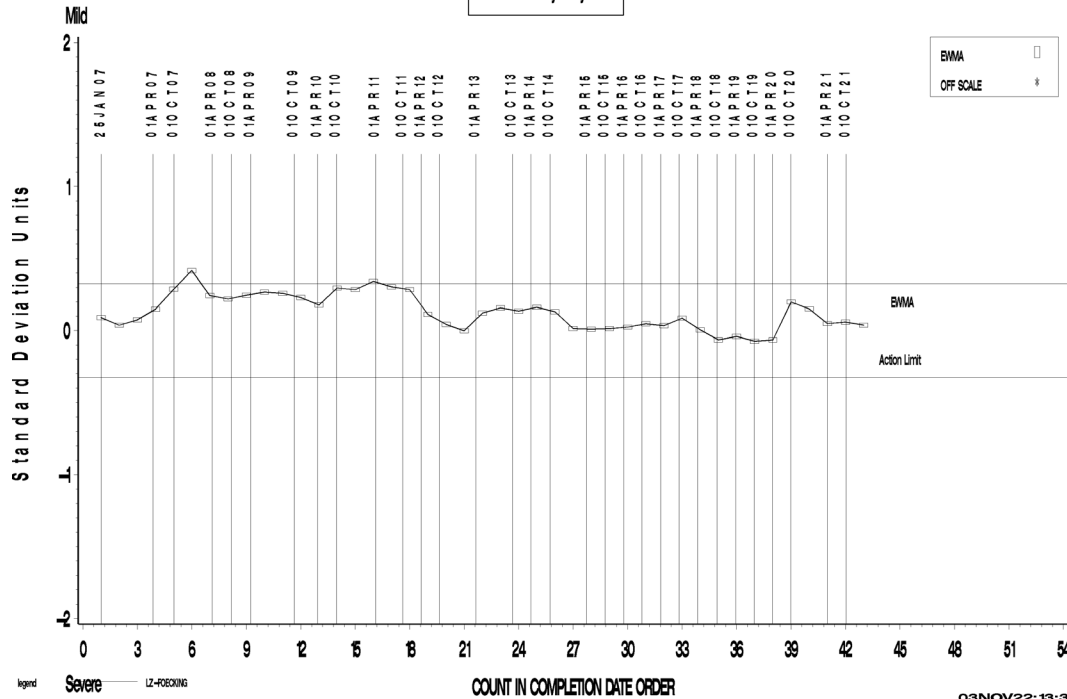
Lab B – RIPP
 Rater 30
 (recently retired)

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:33



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
 412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

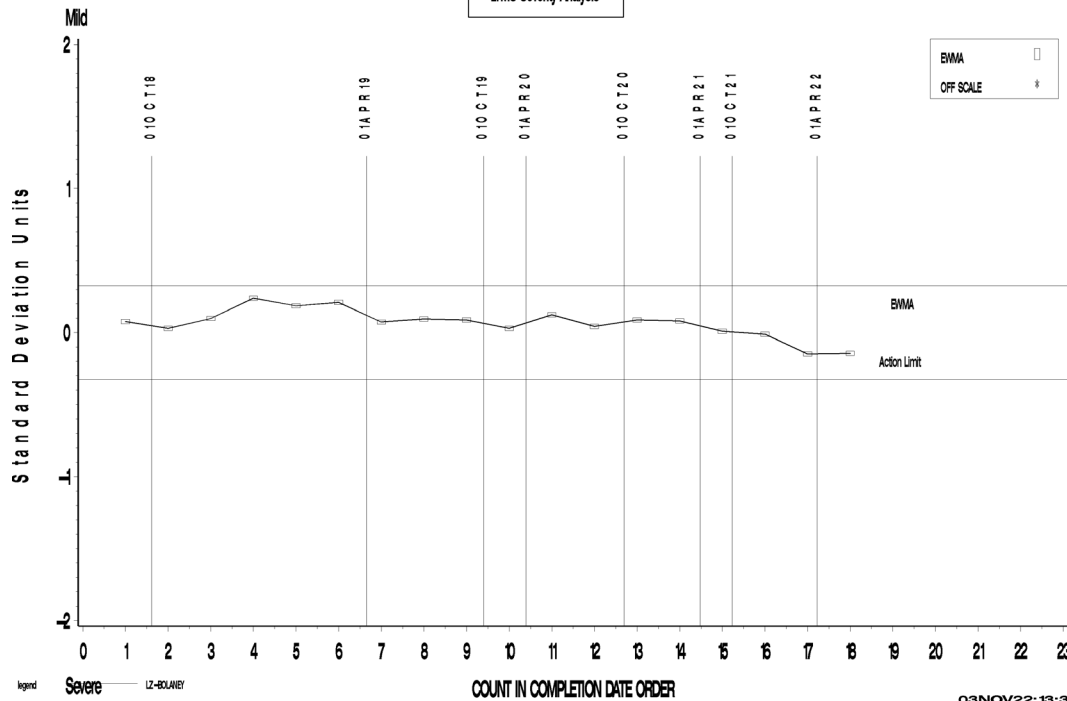
Lab B – RIPP
Rater 44

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:34



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

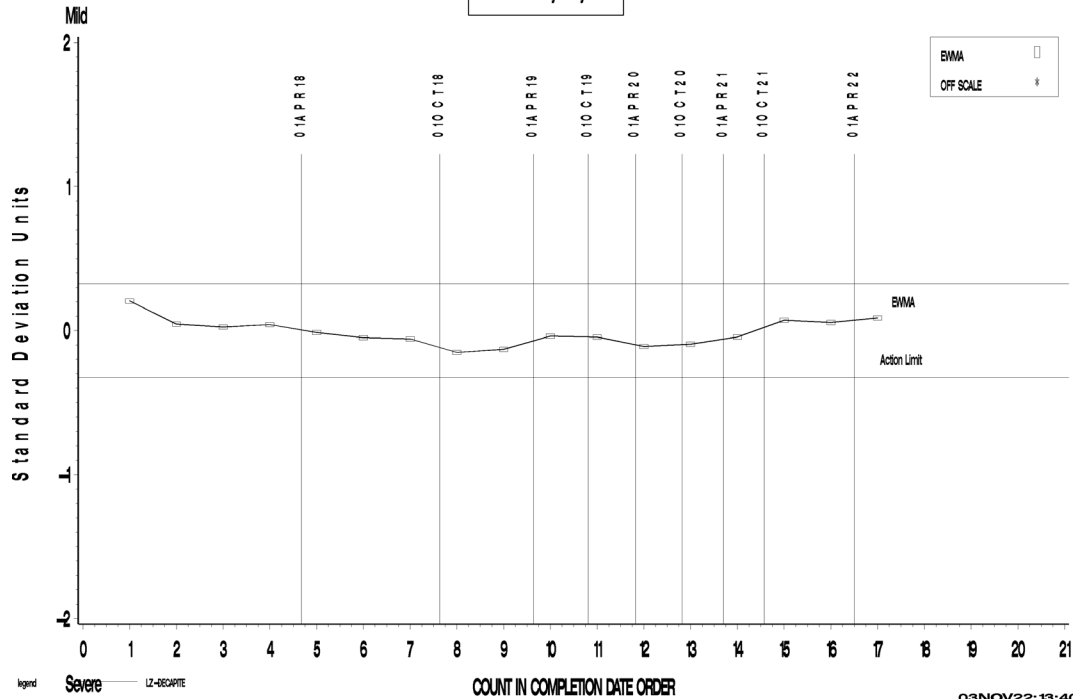
Lab B – RIPP
Rater 43

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:40



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>

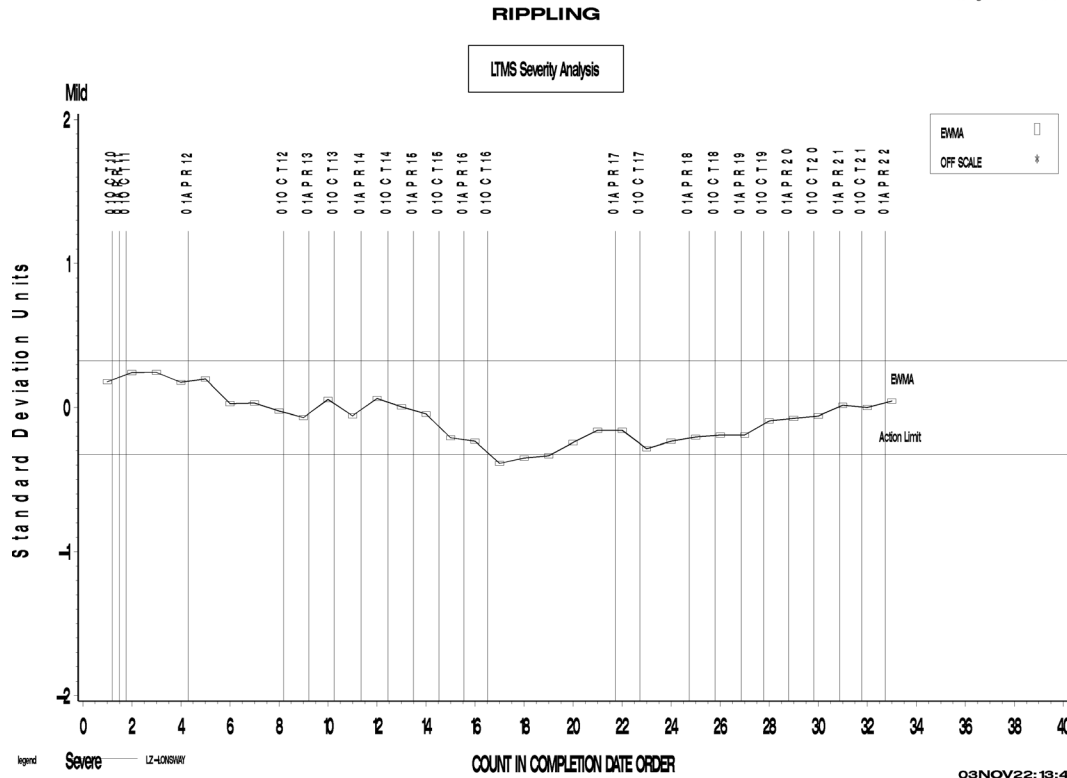


A Program of ASTM International

L-37-1 Charts

Lab B – RIPP
Rater 36

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



03NOV22:13:42



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

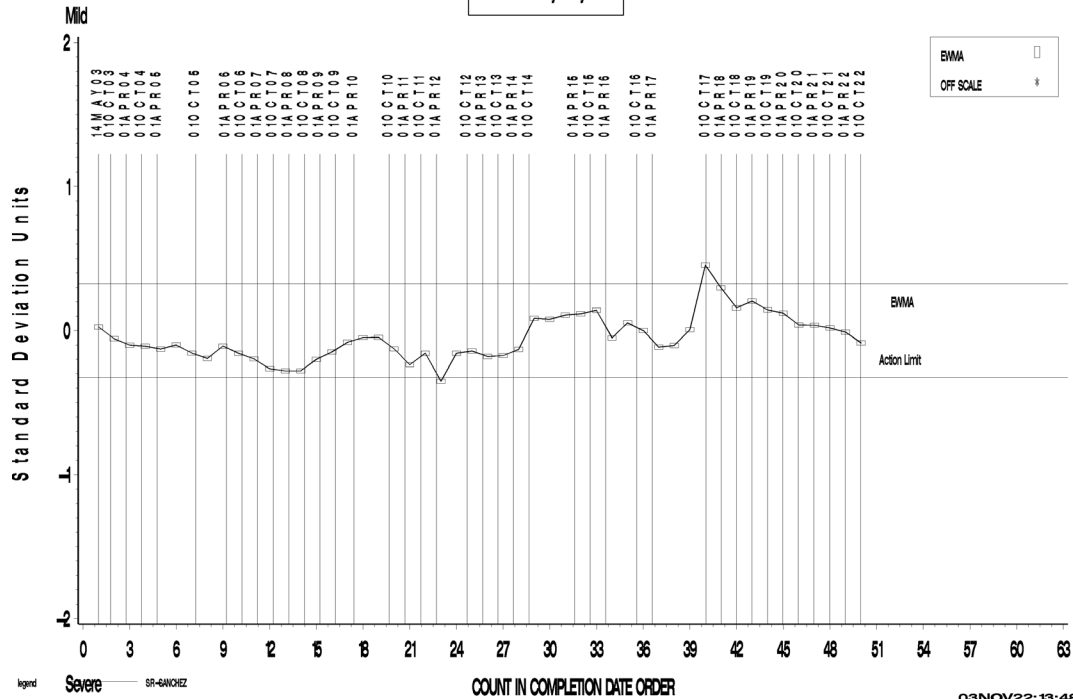
Lab A – RIPP
Rater 10

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:13:48



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

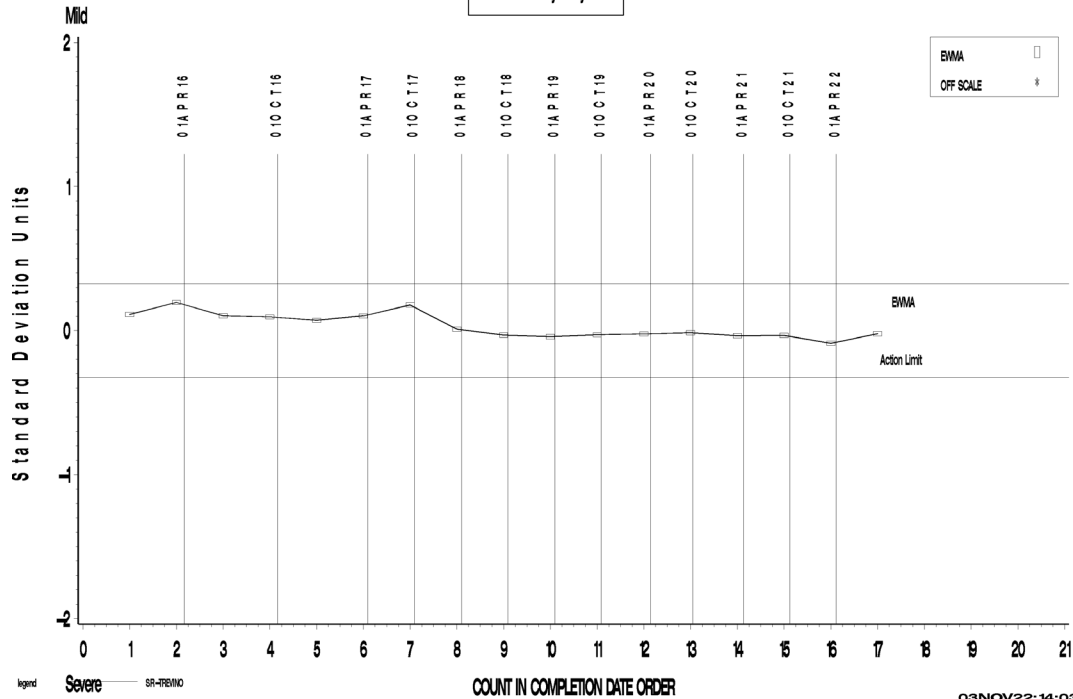
Lab A – RIPP
Rater 38

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22:14:03



A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



A Program of ASTM International

L-37-1 Charts

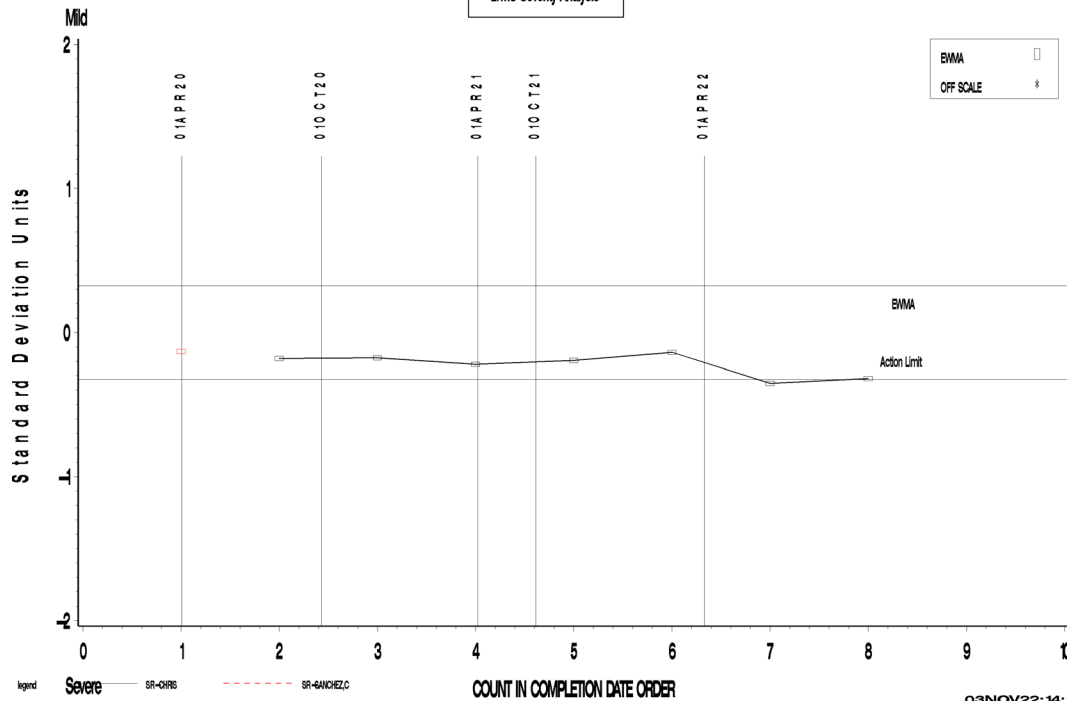
Lab A – RIPP
Rater 47

L-37 RATER CALIBRATION APPARATUS OPERATIONALLY VALID DATA



RIPPLING

LTMS Severity Analysis



03NOV22: 14:11



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

Test Monitoring Center

<http://astmtmc.cmu.edu>



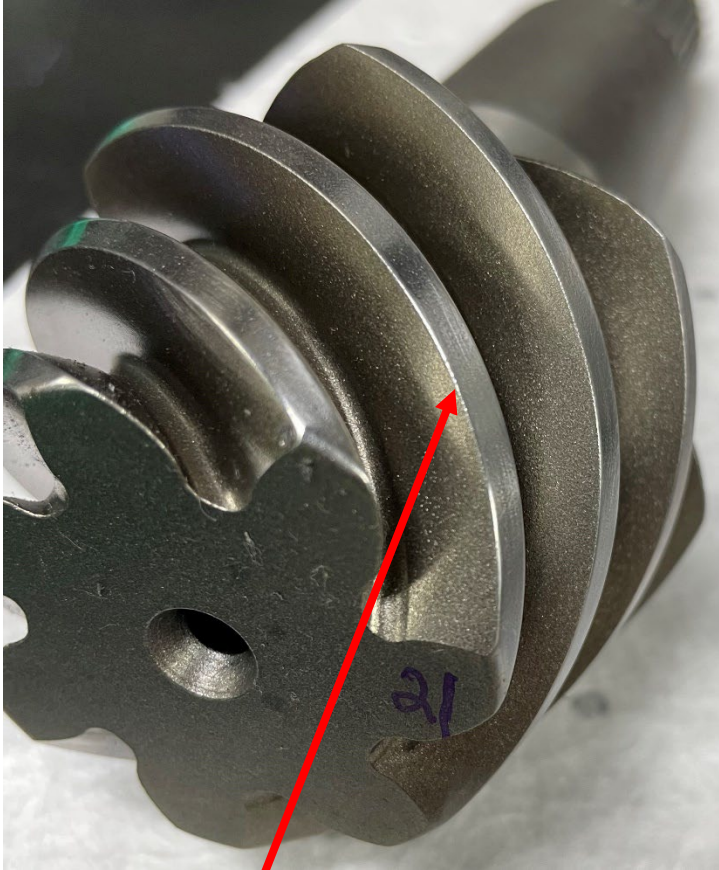
A Program of ASTM International

MnP Coated batch approval process

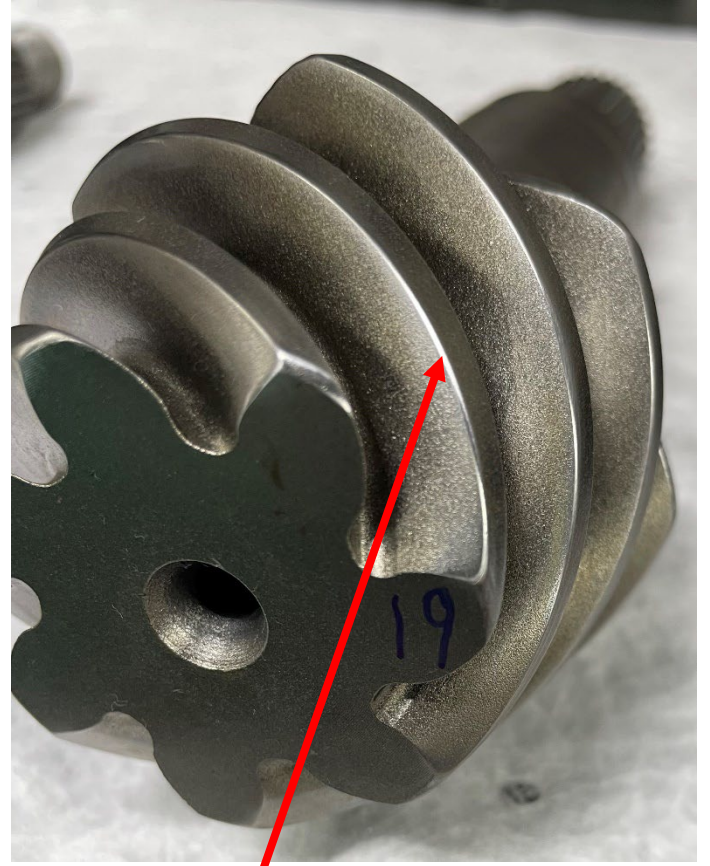
- Each lab will run Gleason 2021 MnP Coated 3 times using the 3 reference oils
- Afton
- Swri
- Intertek ~next week

Gleason Match # issue etc.....

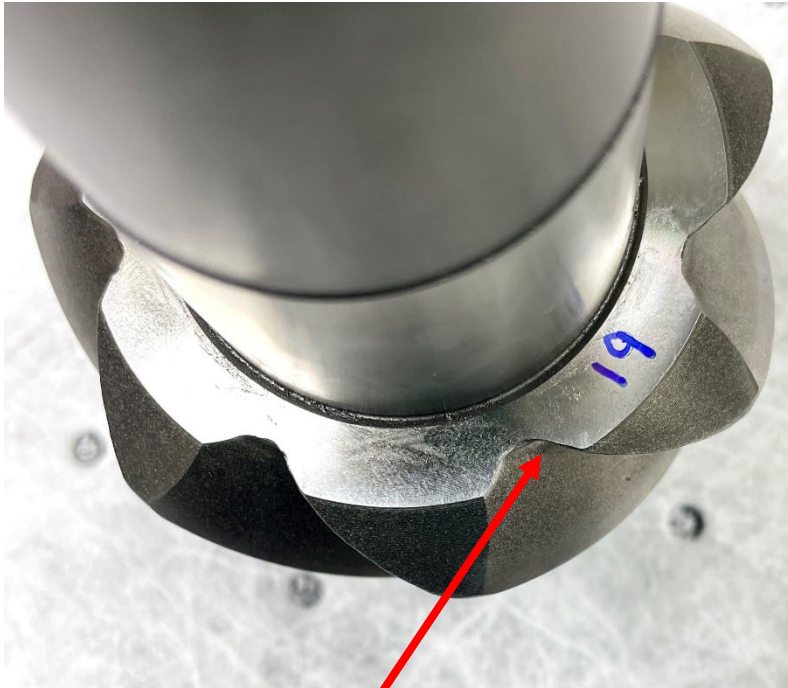
- Email vote to engrave ring...
- Pinion tip relief??
- Mike Dennis include email
- Need to second source



This 2021 edge seems to be a little sharper than the 2019's



2019



Ground edge 2019

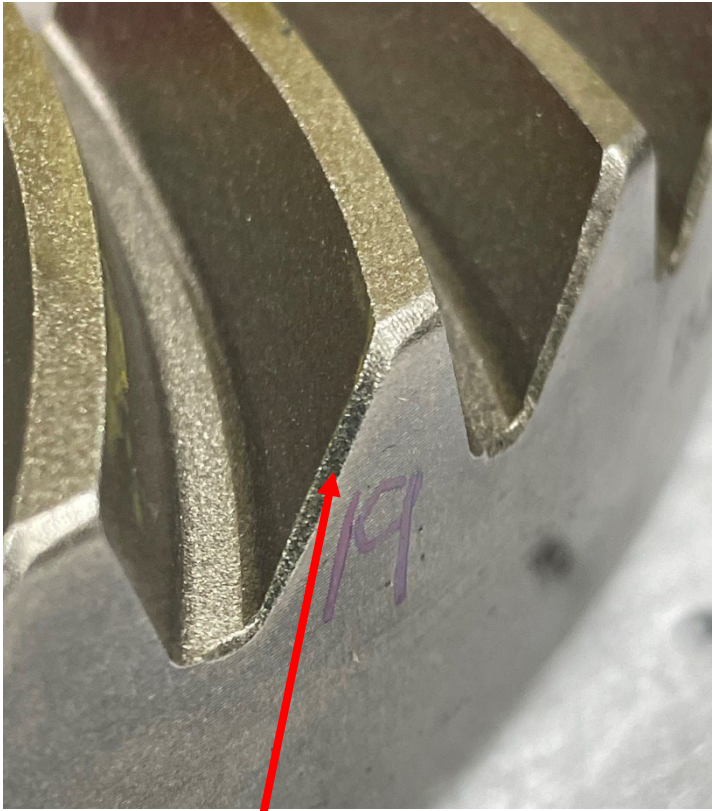


Sharp edge 2021



2019 seems to have more of a chamfer on this edge

2021 has thinner chamfer on this edge



2019 Chamfer



2021 Thin Chamfer





Reference Oil Targets - Canadian

Membership Review

Rob Banas	ExxonMobil
Allen Comfort	US Army
Troy Muransky	AAM
Matt Sangpeal	Afton
Arjun Goyal	BASF
Amy Zyski	Dana
Dylan Beck	TMC
Jason Carter	Cummins - Meritor
Anthony Lange	Intertek
Robert Slocum	Lubrizol
Caroline Mueller	SwRI
Khaled Zreik	GM

Total Voting Members = 12

Old Business

- ?

New Business

Do we need both MnP Coated
and uncoated

Canadian coated most severe

Adjourn