Report of Meeting
L-37-1 Surveillance Panel Conference Call
May 7th , 2025

Attendees:

SwRI -	**Wright,** Charron
Lubrizol -	**Schaup,** Grewe, Parker
Afton -	**Sangpeal,** Bell, Campbell
Intertek -	**Portell**
TMC -	**Beck,** Venhoff, Transue
BASF -	**Goyal,** Margret, Mosher, Steele
Dana -	**Gibson**
Cummins-Meritor -	**Carowick,**Catania
Army -	Sattler, **Comfort**
AAM -	**Muransky,** Zarins
Fuchs -	Bender,Maxim
Oronite-	**Warden**
Shell-	**Schweitzer**,Uy
Exxon-	**Jetter**
Daimler Truck NA-	**Vander Wal**
Richful Lube Additives-	**McCollum**

Voting Members in **BOLD**

1.0 Membership Review

Approved motion for Voting members: Portell and Schweitzer

1st Muransky/2nd Arjun Motion passed unanimously, 15-0-0 (Yes-No-Abstain).

2.0 Meeting minutes Approval

– May 7th, 2025, ASTM Meeting #217

Motion #1 → Beck 1st /2nd Muransky approve the meeting minutes from the May 7th, 2025, ASTM Meeting. Motion passed unanimously, 15-0-0 (Yes-No-Abstain).

3.0 Action Item Review

- Previous Action Items
  - Gleason Hardware approval Matrix (completed for uncoated hardware)

5.0 Canadian Test Version Name Change

- It was decided that the number of document changes that would need to be made (ASTM Procedure, J2360, PD4000) did not make sense for this request.

6.0 Data review of new Gleason Hardware (2025)

- Data was reviewed in the meeting. Those slides are attached to the end of the appendix.
- **Motion #2 → Uncoated hardware (07-2024) is approved with acceptance bands generated by pooling uncoated (07-2024) data with previously approved Gleason batches. This motion Passed unanimously and immediately. Motion passed unanimously, 15-0-0 (Yes-No-Abstain).**
- Stats group is to review this decision with the data and provide a recommendation to the group if they feel something should change.

			SPIT	RIPP	RIDG	WEAR	
Ref Oil 152-2	Pooled Uncoated HW with 07-2024	AVG	9.9	8.3	9.1	7.7	N=44
		STDDEV	0.06	0.91	0.87	0.82	
		Upper Limit	10.0	9.9	10.7	9.2	
		Lower Limit	9.8	6.6	7.5	6.2	
		Upper Limit (whole number adjusted)	10	9	10	9	
		Lower Limit (whole number adjusted)	10	7	8	7	
		ACCEPTANCE BANDS	10-10	7-10	8-10	6-9	

			SPIT	RIPP	RIDG	WEAR	
Ref Oil 134-1	Pooled Uncoated HW with 07-2024	AVG	8.5	7.6	4.7	5.9	N=38
		STDDEV	1.805	1.593	0.992	0.612	
		Upper Limit	11.7	10.5	6.5	7.0	
		Lower Limit	5.2	4.7	2.9	4.8	
		Upper Limit (whole number adjusted)	10	10	5	7	
		Lower Limit (whole number adjusted)	6	5	3	5	
		ACCEPTANCE BANDS	5-10	5-10	3-6	5-7	

7.0 Gear Rating Task force update

- An update was presented to the panel and will be attached in the appendix.
- Motion #3 → **To move to a single Rating Workshop per year with the color coded system used in deposit workshops. Motion passed unanimously, 15-0-0 (Yes-No-Abstain).**
- A presentation was also Given by Dr. Mahdi from Tribodens that demonstrated an automated rating machine.

8.0 Adjourn

Motion #4 → **Sangpeal 1st /2nd Arjun to adjourn. Motion passed unanimously, 15-0-0 (Yes-No-Abstain).**

9.0 Action Item Summary

- Nick Schaup to get the stats group to review the approval of the new hardware and give a recommendation if they feel something should change
- Nick Schaup to bring a draft of the build manual to the next meeting for the strange axle housings

Respectfully submitted,

Nick Schaup
L-37-1 Surveillance Panel Chairman

D02.B0.03

L-37-1 Surveillance Panel Meeting

08/13/2025

Nick Schaup

- Call to Order/Agenda review
- Meeting Minute Approvals
  - May 7th, 2025, Panel Meeting Minutes
- Membership review
- Action Item Review
- Canadian version request
- Hardware Approval Discussion
- Gear Rating Task Force Update – Greg Price
- Old Business
- New business
- Adjournment

Meeting Minutes Approval

- May 7thth , 2025 Panel Meeting Minutes

Membership Review

Steve Jetter	ExxonMobil
Allen Comfort	US Army
Troy Muransky	AAM
Matt Sangpeal	Afton
Arjun Goyal	BASF
Trevor Gibson	Dana
Dylan Beck	TMC
Jessica Carowick	Cummins
Micheal Portell	Intertek
Nick Schaup	Lubrizol
Payton Wright	Southwest Research
Rebecca Warden	Oronite
Clarance McCollum	Richful
Camden Vander Wal	Daimler
Addison Schweitzer	Shell

Total Voting Members = 15

Action Item Review

- Generate new hardware data for approval

Canadian Test Version name change request

- One of the Supplier Members reached out about “Canadian” and if we should change it to something else like cold temperature. It was relayed as a sensitivity towards the name.

Data Review from the TMC

Old Business

New Business

Adjournment

L-37-1 Surveillance Panel Meeting
Uncoated Hardware Matrix Results

Aug 2025

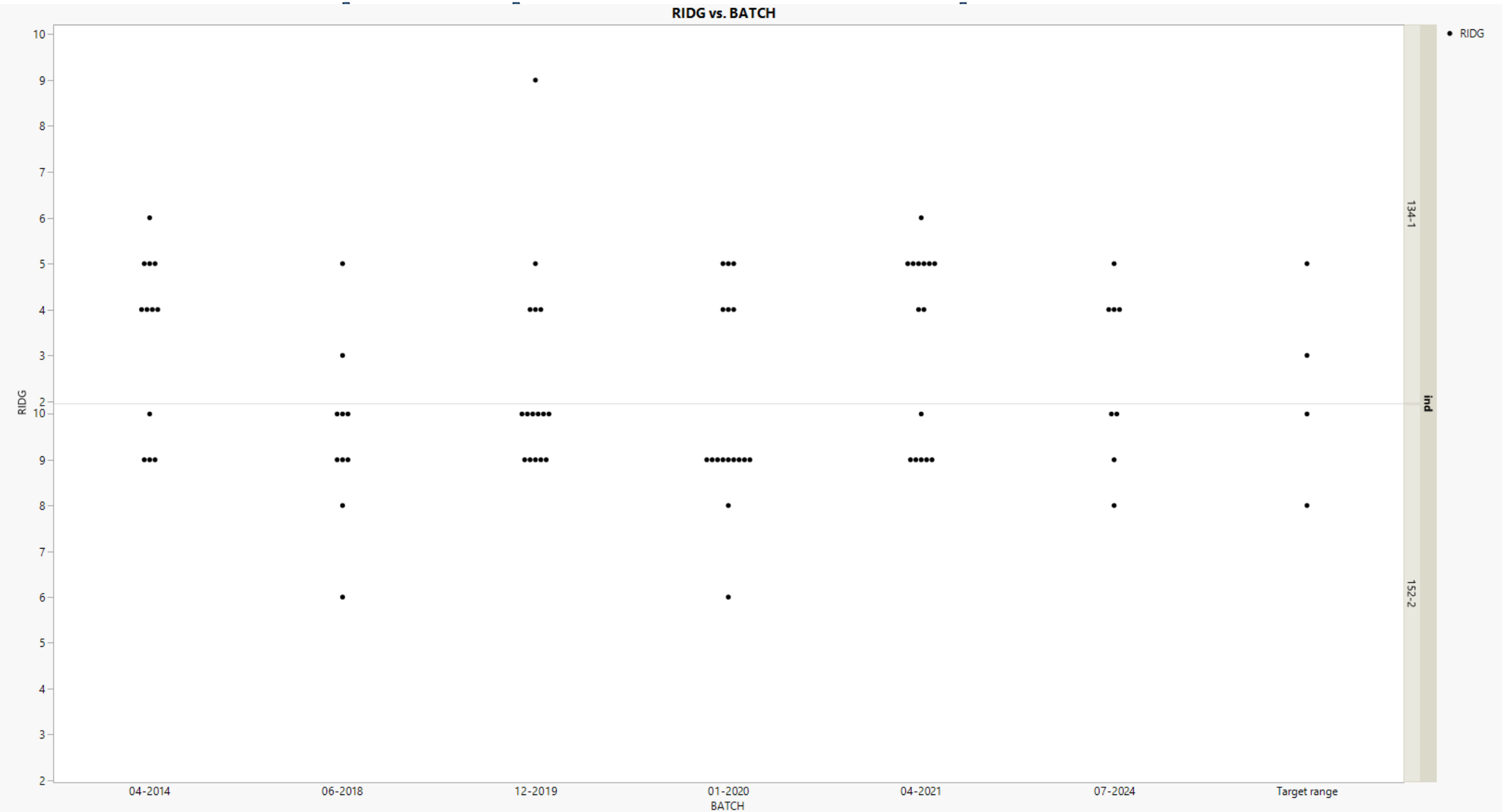
Uncoated Hardware Approval Matrix

- During the May meeting test labs agreed to an approval matrix on the new Gleason hardware.

Oil	Coated	Non Coated
134-1	1	1
152-2	1	1

- Reference oil 155-2 will be phased out for L-37-1 testing and will not be part of this approval matrix.

- Test labs have completed testing on the uncoated hardware.


RIDG vs. BATCH
RIDG
BATCH
04-2014
06-2018
12-2019
01-2020
04-2021
07-2024
Target range
ind
134-1
152-2
RIDG


RIPP vs. BATCH
RIPP
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04-2014
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07-2024
Target range
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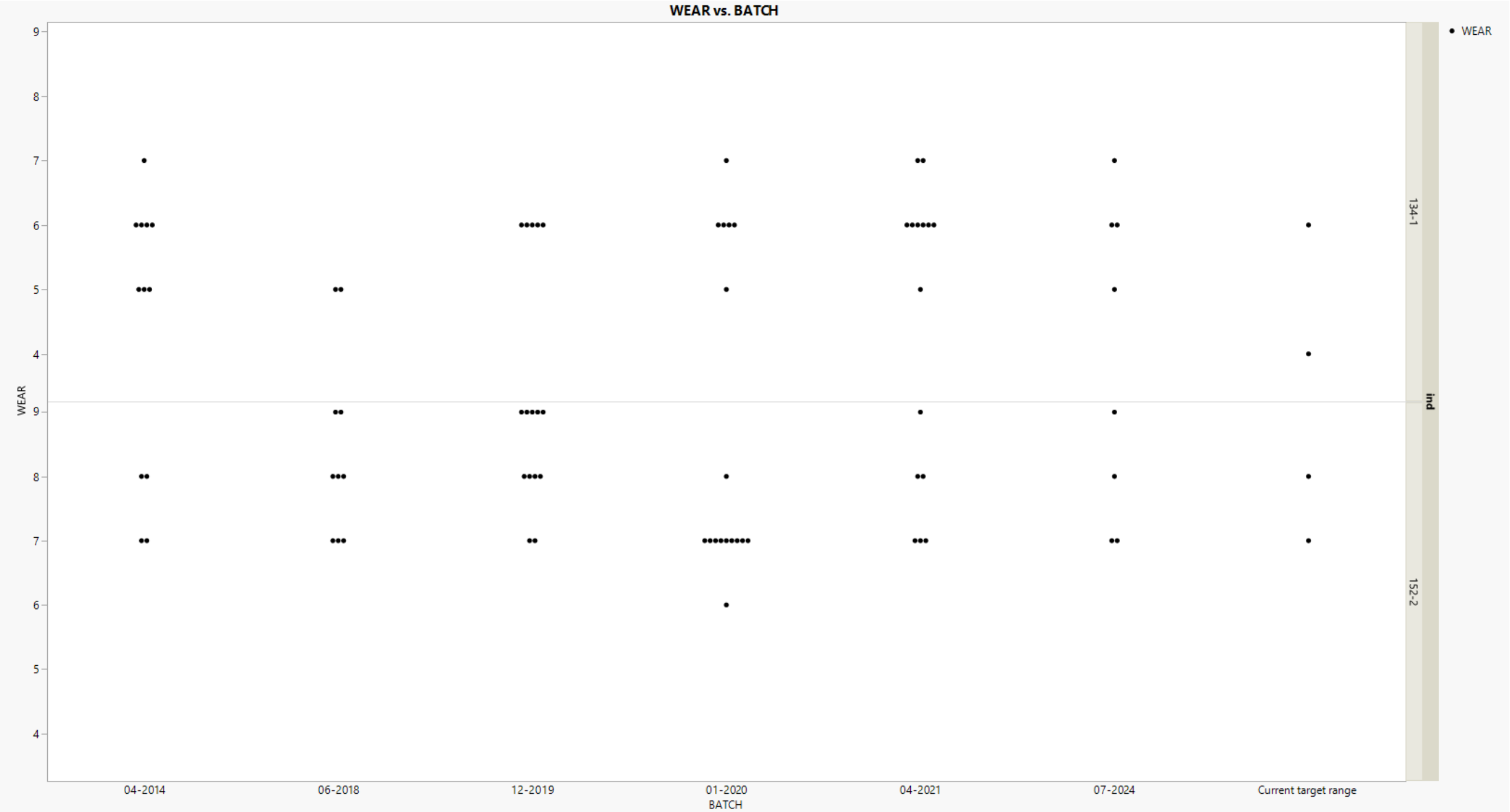
WEAR vs. BATCH
WEAR
9
8
7
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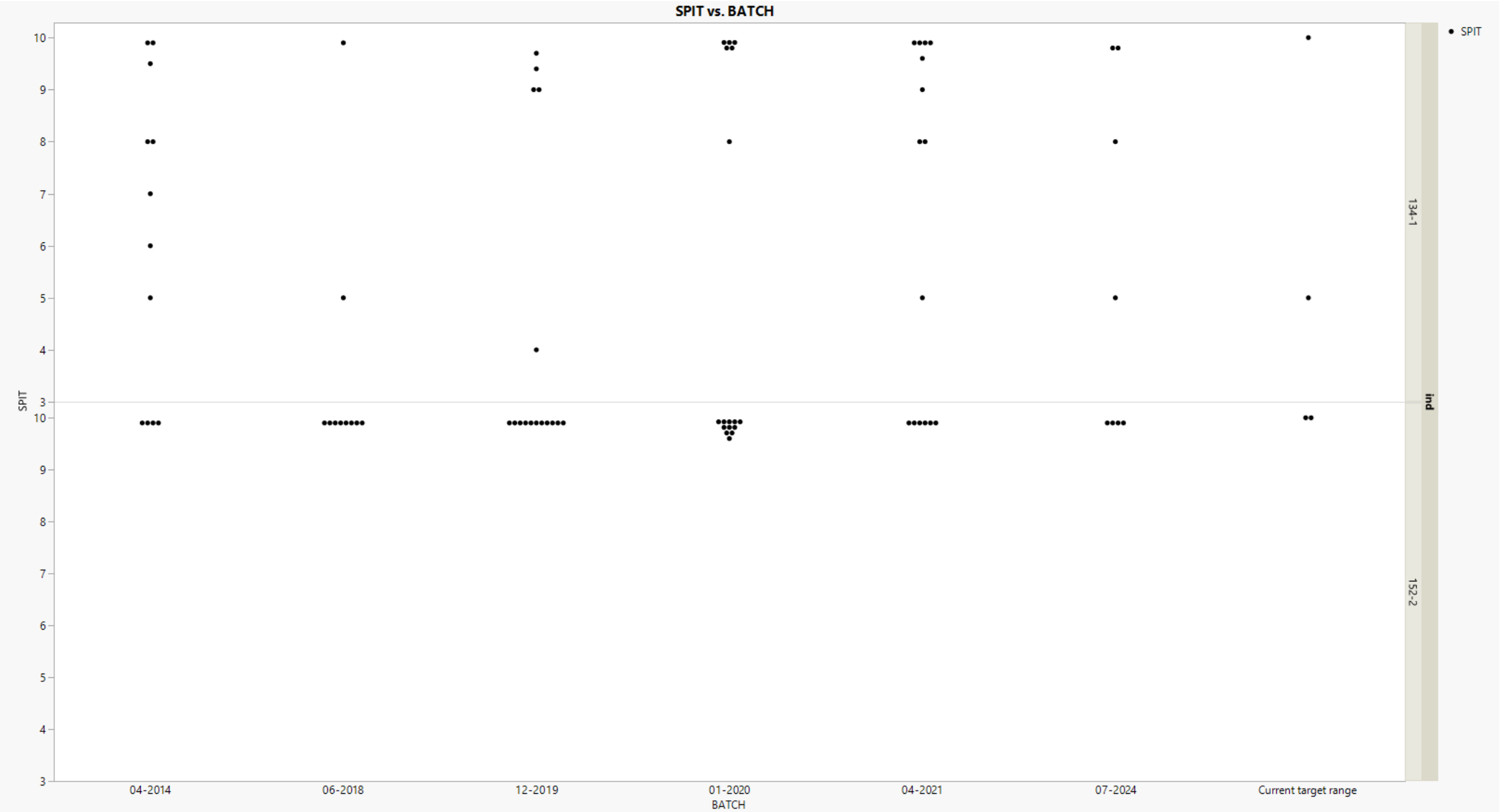
04-2014
06-2018
12-2019
01-2020
04-2021
07-2024
Current target range
BATCH
ind
134-1
152-2
WEAR


SPIT vs. BATCH
SPIT
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134-1
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SPIT
10
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04-2014
06-2018
12-2019
01-2020
04-2021
07-2024
Current target range

L-37-1 Targets

Uncoated HW Batch	Note	TMC Memo
2019/2020	Pooled previous uncoated hw data for target update	Mem 20-027
04-2021	Same as previous hw batch (2019/2020)	Mem 22-026

New HW Approval Target Options

1. Approve 07-2024 hardware with current targets being used for current uncoated hardware batches.

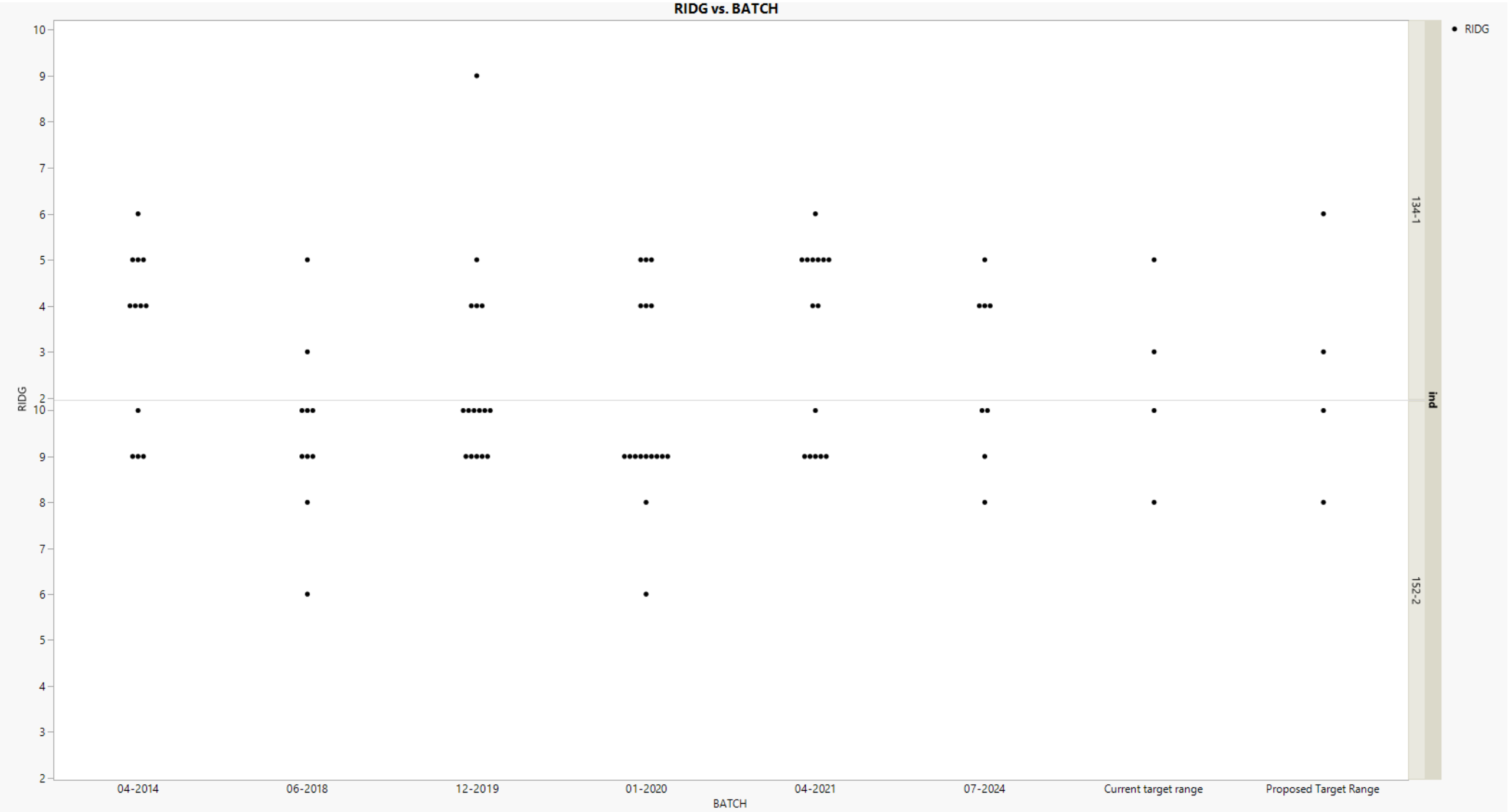
2. Pool together chartable uncoated data and 07-2024 approval matrix results for updated target dataset.

Reference Oil 134-1 Target Comparison

			SPIT	RIPP	RIDG	WEAR	
Ref Oil 134-1	Pooled Uncoated HW with 07-2024	AVG	8.5	7.6	4.7	5.9	N=38
		STDDEV	1.805	1.593	0.992	0.612	
		Upper Limit	11.7	10.5	6.5	7.0	
		Lower Limit	5.2	4.7	2.9	4.8	
		Upper Limit (whole number adjusted)	**10**	**10**	**6**	**7**	
		Lower Limit (whole number adjusted)	**6**	**5**	**3**	**5**	
			SPIT	RIPP	RIDG	WEAR	
Ref Oil 134-1	Current Uncoated HW Targets	Mean	7.9	7.4	4.1	5.3	N=24
		Std. Dev.	2	1.4	0.9	0.9	
		Upper Limit	11.5	9.92	5.72	6.92	
		Lower Limit	4.3	4.88	2.48	3.68	
		Upper Limit (whole number adjusted)	**10**	**9**	**5**	**6**	
		Lower Limit (whole number adjusted)	**5**	**5**	**3**	**4**	

Reference Oil 152-2 Target Comparison

			SPIT	RIPP	RIDG	WEAR	
Ref Oil 152-2	Pooled Uncoated HW with 07-2024	AVG	9.9	8.3	9.1	7.7	N=44
		STDDEV	0.06	0.91	0.87	0.82	
		Upper Limit	10.0	9.9	10.7	9.2	
		Lower Limit	9.8	6.6	7.5	6.2	
		Upper Limit (whole number adjusted)	**10**	**9**	**10**	**9**	
		Lower Limit (whole number adjusted)	**10**	**7**	**8**	**7**	
			SPIT	RIPP	RIDG	WEAR	
Ref Oil 152-2	Current Uncoated HW Targets	Mean	**9.9**	**8.3**	**9**	**7.6**	N=28
		Std. Dev.	**0.1**	**1.2**	**0.8**	**0.7**	
		Upper Limit	10.08	10.46	10.44	8.86	
		Lower Limit	9.72	6.14	7.56	6.34	
		Upper Limit (whole number adjusted)	**10**	**10**	**10**	**8**	
		Lower Limit (whole number adjusted)	**10**	**7**	**8**	**7**	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Proposed Target Range
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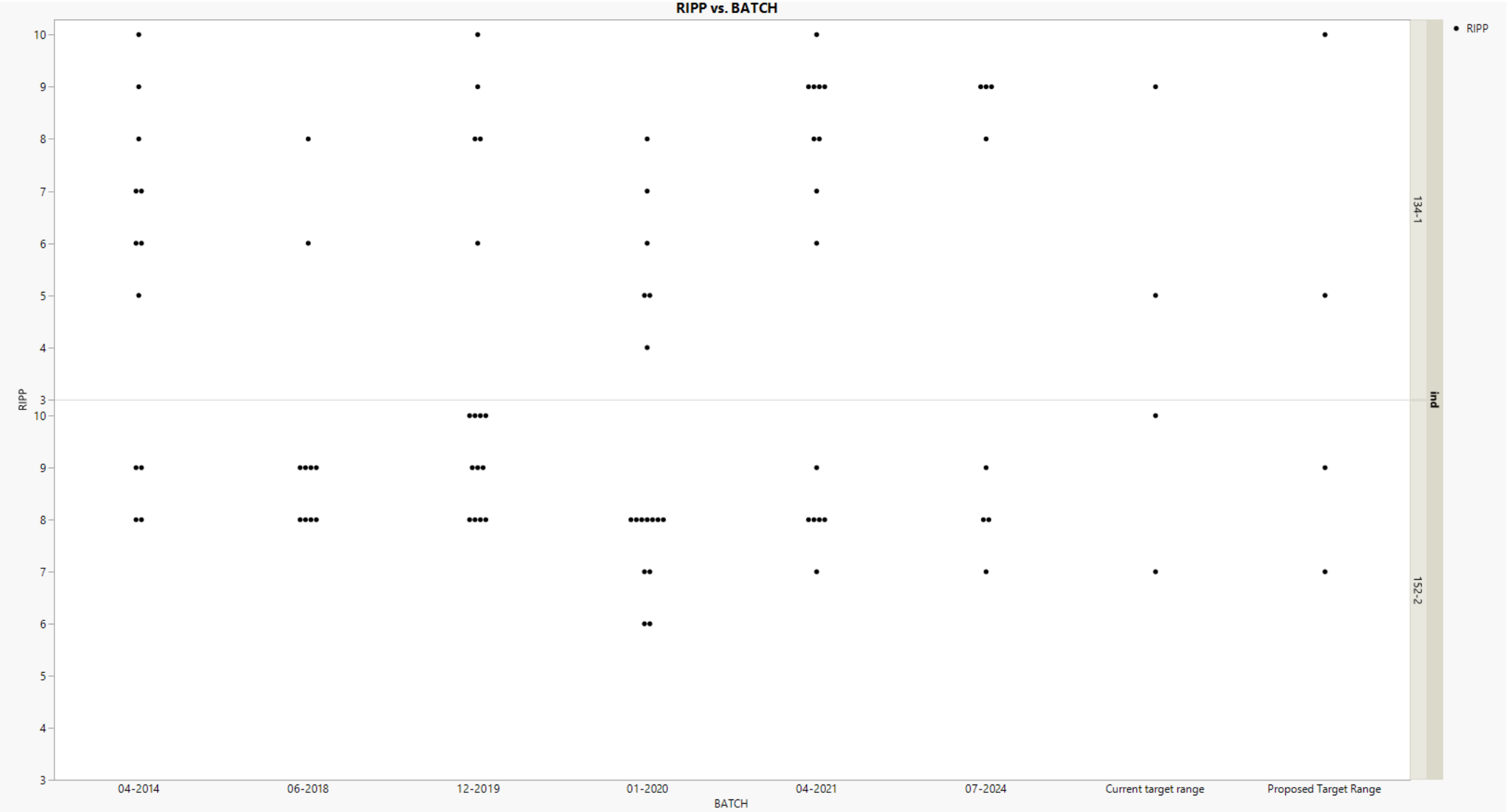
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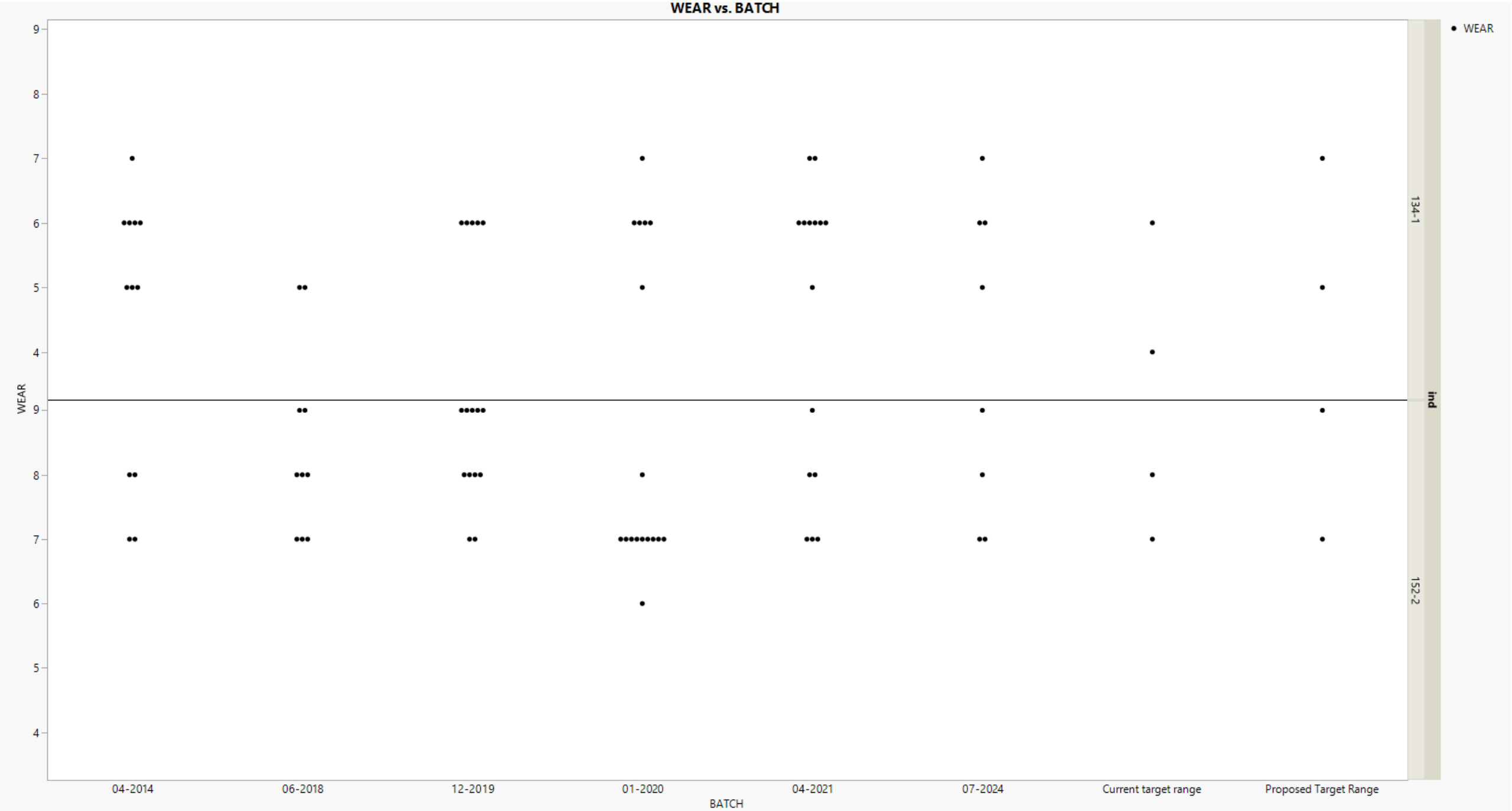
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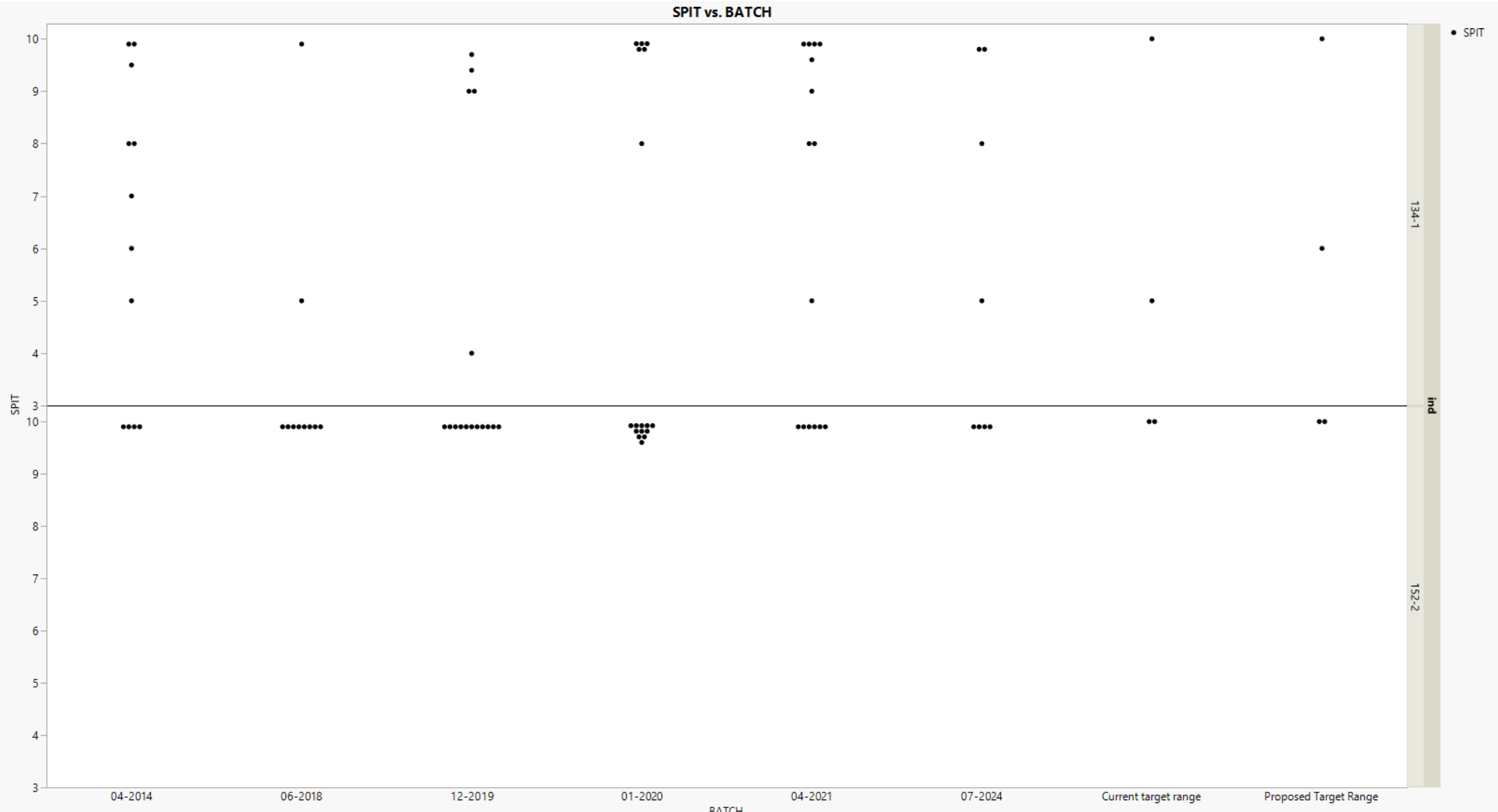
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Proposed Target Range

New HW Approval Target Options

1. Approve 07-2024 hardware with current targets being used for current uncoated hardware batches.

2. Pool together chartable uncoated data and 07-2024 approval matrix results for updated target dataset.
   - Approve as acceptance bands or mean and standard deviation?

3. Send data to the stats group for more analysis

Acceptance Bands?

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L-37-1 Rating Update

Aug 2025

L-37-1 Rating Background

- Gear rating task force has been working on developing an updated rating aid for the Gleason hardware.

- A version of the rating aid was tested out at the July gear rating workshop.
  - Photo examples of Gleason parts and distresses

L-37-1 Rating Aid Development

- After exercises and discussion, the photos in the rating aid were helpful for rating and improved the rater variability for RIDG and RIPP.
- Additional photos are to be added to the aid to show examples of undefined distress and how to rate them
- The rating aid will be modified and added to
- Next step is to send a copy to each of the test labs for review

Gear Rating Task Force

- Raters at the workshop support the idea of going to a color-coded calibration based workshop.
  - Workshop once a year

- Rating group feels that a change to half merit increment rating system could also be beneficial.

Gear Rating Oversight

- Currently the rating authority for each test falls to the test surveillance panel.

- A year ago we gave the rating task force authority to attempt to improve the L-37-1 rating variability.
  - With the development of a rating aid improvements are being made

Actions that can be taken

1. Vote to give the rating task force oversight of gear test rating

2. Vote to change the structure of the gear rating workshop
    1. Changing to a once a year calibration style workshop

3. Keep developing the rating aid and hold another workshop in January and July 2026

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