

**Report of Meeting**  
**L-60-1 Surveillance Panel Conference Call**  
**November 9th, 2022**

**Attendees:**

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

Voting Members in **BOLD**

**1.0 Membership Review**

**Motion #2** → R. Slocum 1<sup>st</sup> /2<sup>nd</sup> J. Carter to approve the change of Nick Schaup to take the place of Robert Slocum as the L60-1 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 1<sup>st</sup> /2<sup>nd</sup> J. Carter to approve the meeting minutes from the August 10th, 2022, ASTM Meeting. Motion passed unanimously, 11-0-0 (Yes-No-Abstain).

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

- See appended PowerPoint for L-60-1 Severity Experiment Summary
- Labs operational data summary not much to show any lab differences
- Labs to do another 4-lab run
- Will work with Travis to identify which lab makes sense to prep the gears for next experiment

#### 4.0 Old Business

- Look into addressing or removing “Sole Source Suppliers” instances in D5704

#### 5.0 Adjourn

**Motion #3 → A. Lange 1<sup>st</sup> /2<sup>nd</sup> W. Venhoff 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

11/09/2022

15:00 pm– 16:00 pm

Robert Slocum

# Agenda

- Call to Order/Agenda review
- Meeting Minute Approvals
  - August, 10<sup>th</sup> 2022, ASTM Meeting
- L-60-1 Severity Task Force Follow-up
  - 4 run follow up
  - TMC data upload follow-up
  - Gear analysis?
- Membership review
- Old Business
- New business
- Adjournment

# Meeting Minutes Approval

– August 10<sup>th</sup>, 2022, ASTM Meeting

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

- 4 run follow up
- TMC data upload follow-up
- Gear analysis?



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## **LRI 207 Surveillance Panel Meetings L-60-1 Severity Experiment Summary**

November 9, 2022

# L-60-1 Severity Experiment - Overview

- L-60-1 testing has had an (almost) industry wide severity issue for the past couple of years
- Several investigations have taken place
  - A build workshop was held in April 2022 – No conclusions reached
- In August it was decided that an investigation will take place where Lab D preps all of the gears to be run at each of the four labs.



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# L-60-1 Severity Experiment - Results

Testkey	Lab	Ind	LTMSDATE	ASL	ACV	TOL	PEN	VISI	RGEARBAT
174334-L601	A	148-1	20220908	9.5	8.4	0.4	0.5	40	06-18-48
174330-L601	D	148-1	20220908	9.6	8.5	0.4	0.4	36	06-18-48
174336-L601	B	148-1	20220908	9.5	7.9	0.4	0.5	37	06-18-48
174332-L601	G	148-1	20220913	9.7	8.3	0.7	0.8	39	06-18-48
		<b>148-1 Targets</b>	<b>Mean</b>	<b>9.532</b>	<b>8.306</b>	<b>0.257</b>	<b>0.387</b>	<b>36.966</b>	
			<b>STD</b>	<b>0.106</b>	<b>0.511</b>	<b>0.249</b>	<b>0.413</b>	<b>7.659</b>	
		<b>Shewhart Severity Limits</b>	<b>Upper Limit</b>	<b>9.7</b>	<b>9.2</b>	<b>0.7</b>	<b>1.1</b>	<b>50.8</b>	
			<b>Lower Limit</b>	<b>9.3</b>	<b>7.4</b>	<b>-0.2</b>	<b>-0.4</b>	<b>23.2</b>	



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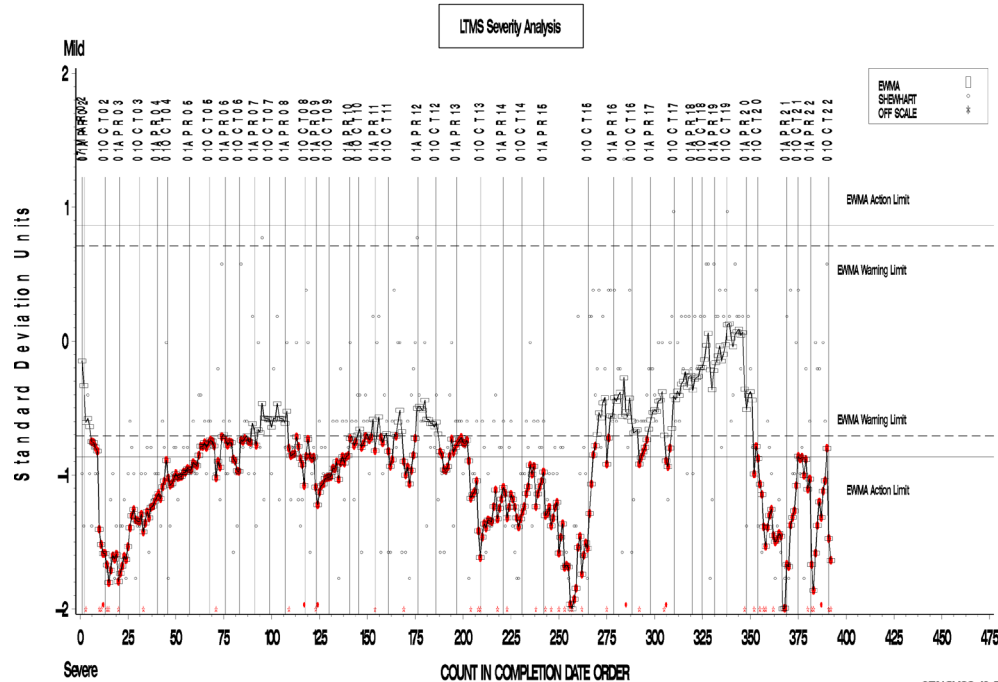
<http://astmtmc.cmu.edu>



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# L-60-1 Industry Charts For 148-1 (ACV)

L-60-1 INDUSTRY OPERATIONALLY VALID DATA  
 ind= '148-1'  
 REF. FINAL AVERAGE CARBON/ VARNISH



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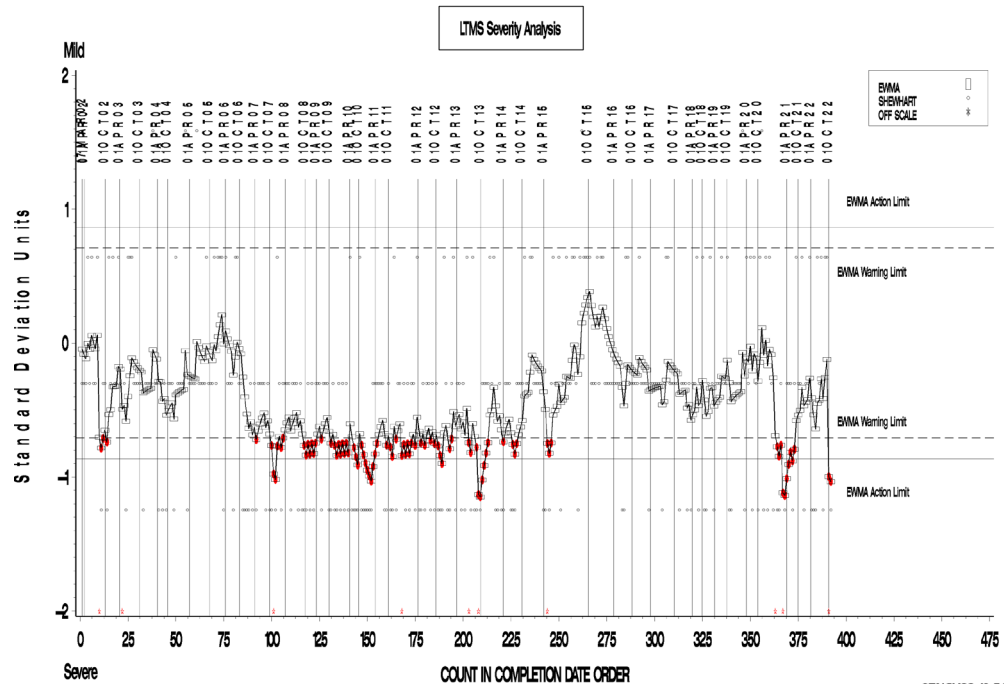
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# L-60-1 Industry Charts For 148-1 (ASL)

L-60-1 INDUSTRY OPERATIONALLY VALID DATA  
 ind= '148-1'  
 REF. FINAL AVERAGE SLUDGE



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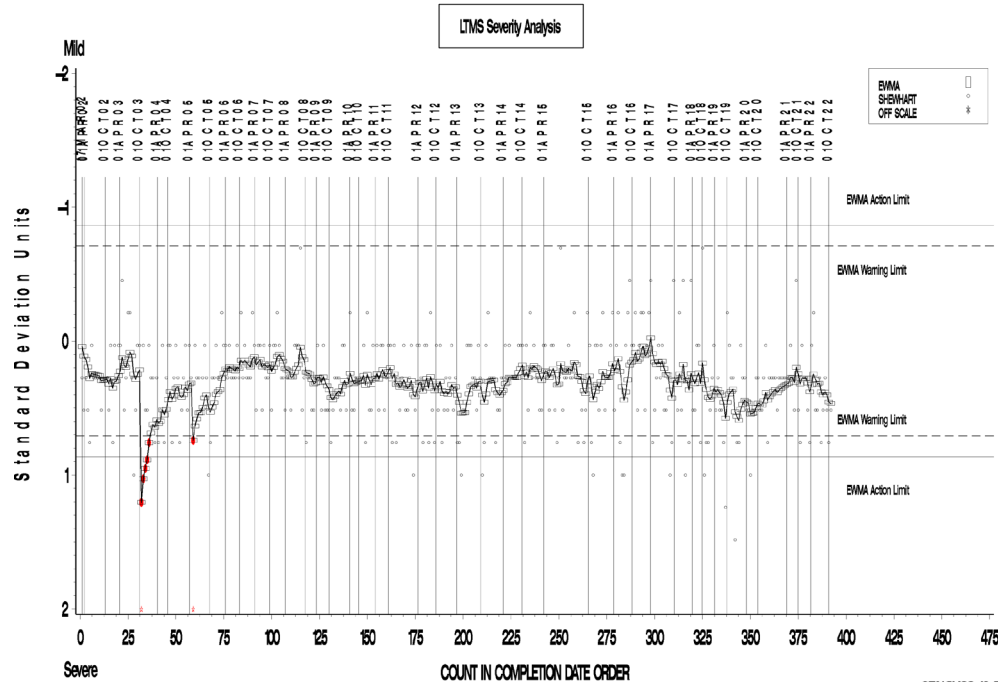
<http://astmtmc.cmu.edu>



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# L-60-1 Industry Charts For 148-1 (PEN)

L-60-1 INDUSTRY OPERATIONALLY VALID DATA  
 ind= '148-1'  
 REF. FINAL PENTANE INSOLUBLES



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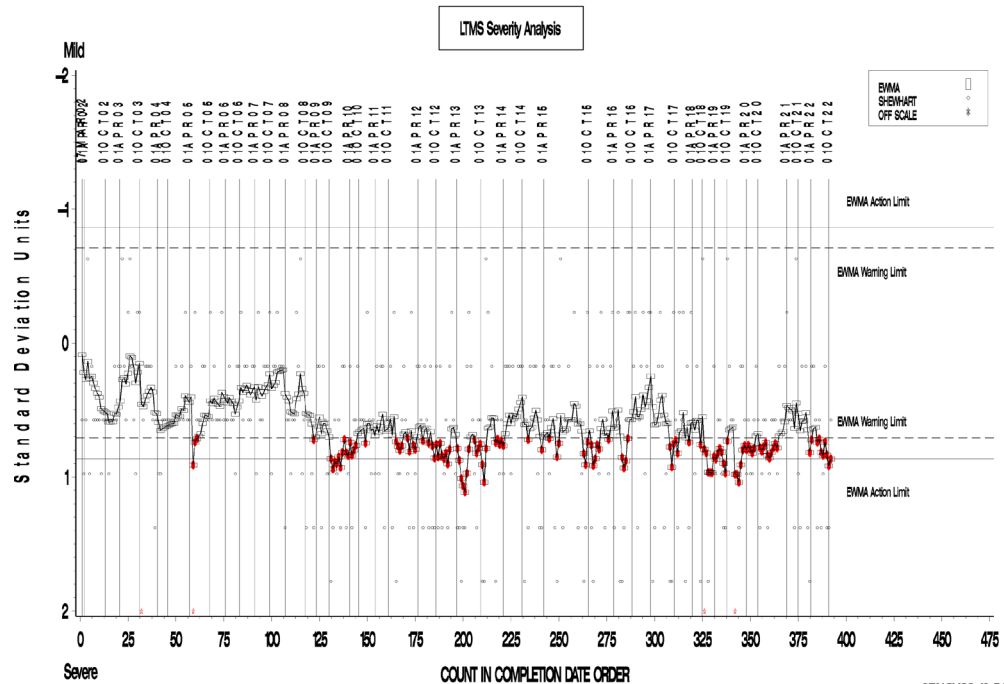
<http://astmtmc.cmu.edu>



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# L-60-1 Industry Charts For 148-1 (TOL)

L-60-1 INDUSTRY OPERATIONALLY VALID DATA  
 ind= '148-1'  
 REF. FINAL TOLUENE INSOLUBLES



07NOV22:10:54



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# L-60-1 Severity Experiment – Conclusion

- Lab D prep results show improvement compared to recent industry results for 148-1
- All four results fall within the Shewhart severity limits of the targets
- How do we isolate the cause for this improvement and apply it to the rest of the industry?
- If the improvement was due to gear prep, how was this not noticed during the April 2022 build workshop at Southwest Research?



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

- TMC data upload follow-up
  - Travis



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

– Gear analysis?





# Membership Review

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



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Old Business

New Business

Adjournment