Report of Meeting L-37-1 Surveillance Panel Conference Call

March 11th, 2021

Attendees:

SwRI - Warden

Lubrizol - Venhoff, **Slocum,** Drjla

Afton - Sangpeal Intertek - Lange, Smith

TMC - Beck
ExxonMobil - Banas
BASF - Goyal
Dana - Zyski

Meritor - Carter, LaBond

Army -

AAM - Muransky

Linamar -

Voting Members in **BOLD**

1.0 L-37-1 Number of Reference Oils Discussion

The following are bullet points I gathered during today's call:

- Question if 3 references oils are still necessary?
 - N-size hard to obtain statistical numbers due to 6 combinations
 - Should we frontload doing more testing with new hardware??
 - Is 155 a heavier gear oil Viscosity(monograde) may be higher than conventional usage today.
 May not represent candidates currently running?
- Wes to Dylan what are the high and lows bands of refence oils
 - Target range versus J2360 limits
 - Is there a concern if the reference oil falls below J2360 minimums?
 - Will still need to maintain Canadian reference oil for new hardware batches
- Dale Smith 134 fail, 155 strong pass, the 152 oils was brought in for Canadian reference. Was used historically as batch approvals and gained traction into referencing
 - 152/153 fleet oils supposed to be Canadian only
 - Never intended to be fully in our matrix of reference oils
 - 152 close to borderline than 155 (could choose one or the other)
- Arjun expressed to keep 152? For new batches of hardware at lower temperature (Canadian) to qualify

• Anthony showed that 152 and 155 almost identical except ridging on nonlubrited

Average STD Dev				High Limit	Low Limit
9	0.8	152-2	Ridg	10.44	7.56
8.3	1.2		Ripp	10.46	6.14
7.6	0.7		Wear	8.86	6.34
9.9	0.1		Spitt	10.08	9.72
9.5	0.5	155-1	Ridg	10.4	8.6
8.6	1.1		Ripp	10.58	6.62
7.5	0.7		Wear	8.76	6.24
9.9	0		Spitt	9.9	9.9

- TMC ok on dropping
 - Would like to see some statistical value of dropping one
 - Dylan why was 152 implemented in the first place?
 - Look at stats between 155/152 to see if useful or not
 - Industry Stats group currently looking at targets possibly have them do some analysis of any issues dropping one reference oil
 - o Becca Table it until feedback from industry stats group
 - o 155-1 enough for about a year. Have time to figure out 155-2 if needed.
 - Does anyone have concerns if 152 is dropped?
 - Possibly keep it for Canadian new hardware approval

Respectfully submitted,

Robert Slocum L-37-1 Surveillance Panel Chairman