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

December 5th, 2019

Attendees:

SwRI - Warden

Lubrizol - Venhoff, **Slocum,** Drjla

Afton - Sangpeal, Bell Intertek - Smith, Lange

TMC - Beck

ExxonMobil -

BASF - **Goyal** Dana - **Zyski**

Meritor - Rabinowitz, LaBond

Army -AAM -Linamar -

Voting Members in **BOLD**

The meeting was called to order at 10:00am EST.

Additional modified conditioning data points with deeper Cdepth and std grind (80)

- 134-1 Standard Conditions w/modified conditioning (SwRI and Afton)
- 152-2 Canadian Conditions w/modified conditioning (LZ)
- 152-2 Standard Conditions w/modified conditioning (Intertek)

Housings - Strange vs. Dana

- Overall consensus that labs would have option to run either
- · How many rebuilds on Strange housing
 - Determined at later date
 - Possibly get opinion from Strange themselves
- Continue serializing housing with current process

Schedule

• I'll set-up Conference call first full week of January

Gleason Quote

- I'll work with Gleason to get quote in process
- · Will determine overall case depth from additional modified condition data points from above

Respectfully submitted,

Robert Slocum

L-37-1 Surveillance Panel Chairman

L-37-1 Gleason Hardware Discussion

12/5/2019 10:00 am – 11:00 am Conference Call



D02.B0.03

TMS	IND	V/	PIN	RING	WEA	RIC	RIL	SPI	WE/	RIDC	RIP	SPI	Comment
В	152-2	MI	2736809	2736812	8	9	10	9.9	9	9	10	9.9	55/65 Cdepth 80 grit
В	152-2	M	2736803	2736806	8	9	10	9.9	9	9	10	9.9	120 grit
В	152-2	M	2736815	2736846	8	9	10	9.9	9	9	10	9.9	55 - 65 Case, 120 Grit
Α	152-2	MI	2731181	2731183	7	8	8	9.9	7	8	9	9.9	55 - 65 Case, 120 Grit
В	152-2	M	2736809	2736812	8	8	9	9.9	9	9	10	9.9	55/65 Cdepth 80 grit
Α	152-2	MI	2731176	2731177	7	8	9	9.9	8	9	10	9.9	120 Grit
Α	152-2	NI	2731178	2731180	7	8	9	9.9	7	9	9	9.9	55/65 Cdepth 80 grit
В	152-2	MI	2736803	2736806	8	10	10	9.9	8	10	10	9.9	120 grit
В	152-2	NI	2736815	2736846	9	10	10	9.9	9	9	10	9.9	55 - 65 Case, 120 Grit
G	152-2	NI	2736808	2736811	8	9	9	9.7	8	9	9	9.9	Mod. Cond 55/65 Cdepth 80 grit
Α	152-2	NI	2731178	2731180	7	8	9	9.9	7	8	9	9.9	Mod. Cond 55/65 Cdepth 80 grit
G	134-1	NI	2736808	2736611	7	7	7	9.9	7	6	9	9.9	Mod. Cond 55/65 Cdepth 80 grit

^{*}Update on lead time. "45 sets per lab would be best for us to hit 6-8 week lead time."



D02.B0.03

	Per lab	Total
Material Blank Purchased	275	1100
2018 NL Batch Processed	55	220
Net		880

Desired Process? Desired quantities per lab?

Also I have contacted Gleason and the response of quantity of unprocessed material on hand is as follows.

"We have 831 gear and 873 pinion blanks. Lead time would 8-10 weeks."

The Gleason Works

Gleason

QUOTATION

Total Gear Solutions

GLEASON QUOTATION No.	VERSION	QUOTE DATE
220030244	2	10/03/2018
INQUIRY REF.		INQUIRY DATE

Sold To: 6284 LUBRIZOL CORPORATION 29400 LAKELAND BLVD. WICKLIFFE OH 44092-2298 ATTN: Wes Venhoff

Wes Venhoff, we have the pleasure of Quoting as follows

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∏EM №	QUANTITY	DESCRIPTION	UNIT PRICE (USD)	TOTAL (USD)
		End User: LUBRIZOL CORPORATION		
		Contact: Wes Venhoff Phone: 440-347-4879		
0010	275 EA	Gleason Material Nr.: 1803447	295.00	81,125.00
		ASTM 5.86 Ratio - Material & Blanks 41T GEAR (1806366) & 7T PINION (1806365) MATERIAL & BLANK		
		GLEASON FINISHED SET #1758276 QUOTED: - RAW MATERIAL - BLANKING		
		Delivery: 14 Weeks From receipt of your formal order		
0020	55 EA	Gleason Material Nr.: 1758276	297.00	16,335.00
		Gear Set, ASTM 5.86(7X41) Ratio 7T Pinion 1758277 41T Gear 1758278 QUOTED: MAKE COMPLETE WITH CUSTOMER PURCHASED MATERIAL & BLANKS		
		Delivery: 9 Weeks From receipt of your formal order		