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### **Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS**

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August 2, 2007

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ASTM D02.B0.03 L-60-1 Surveillance Panel  
Members and Guests:

Attached for your review and comment are the unconfirmed minutes of the February 14, 2007 L-60-1 Surveillance Panel meetings held at the PRI Headquarters, Warrendale, PA. Please direct any corrections or comments to my attention.

Sincerely,

Chris Schenkenberger, Chairman  
L-60-1 Surveillance Panel

Attachments

**Report of Meeting**  
**L-60-1 Surveillance Panel**  
**PRI Headquarters, Apollo Room, Warrendale, Pa.**  
**February 14, 2007**

**Sign-in/Review of Membership:** The meeting was called to order at 9:45 am. The sign-in sheet is **Attachment 1**. The chairman opened the meeting with a review of the current membership list which is in the process of being updated. Recent changes included the removal of Ron Johnson from Chevron since he has retired and changing Bill Sullivan to a voting member of WTSullivan, Inc. Mr. Kanga and Mr. Eliot of ExxonMobil will decide who will be the voting member for their company. Mr. Eliot stated that Arjun Goyl should be removed from the list with his recent retirement.

**Approval of Minutes**

**Motion 1** ⇒ Mr. Rae, Second ⇒ Mr. Smith) – Approve both sets of minutes (11/15/06 and 9/6/06) with no corrections or additions. The motion to approve was unanimous (6, 0, 0).

**Summary of Meeting Discussions**

**January 2007 Rater Calibration Workshop**

A review of the rater workshop data was initiated by the chairman and the TMC (**Attachment 2**). Mr. Lind stated that he feels the prior 2 workshops have been very good in terms of rater consistency. This timing correlates with an information letter that standardized many facets of the L-60-1 rating procedure such as gloves and how the gears are held. Annex A-10 in the D5704 details the rating enhancements that were made. However a larger spread appeared to be present with some gear sets from the January 2007 workshop.

The chairman indicated that the Lubrizol statistician had compared this aggregate data set from January compared to the prior 3 workshops. As a whole, the variability of this workshop was no worse. However some outliers were present in January which could change this conclusion. For instance, the ACV range for gear set # 7 was 1.75. Mr. Lind asked the surveillance panel members for their opinion on acceptable variation in average carbon varnish ratings. The general feeling of the surveillance panel was that acceptable reproducibility should be no greater than  $\pm 0.5$  merit numbers. The fact that the current rating system precision is in tenths of a whole number and historical workshop data factored into this reasoning.

Mr. Lind did provide some observations on possible causes for outliers measured in this workshop which are as follows:

- Backdrop lighting washing out local rating lights – While the specific lights and correct rating lumens were confirmed, this specific rating area seemed to be much more bright and different than past workshop environments. Mr. Lind requested that the next time the workshop is hosted in San Antonio, this lab rating area not be used.
- Variation in Raters from workshop to workshop – Calibration only requires attendance in 1 workshop per year. This frequency could be a cause for inconsistency. However it was acknowledged that more data would need to be gathered to confirm that increased frequency of attendance would actually lower variability.

The panel also discussed the fact that the calibration data showing the original rating was not disclosed in the two most recent workshops. Mr. Lind reminded the group that this was a request by the raters in which the SP honored. The panel felt that this can impact the ability to confirm the impact of the workshop since the calibration represents how each individual is rating prior to attending. The SP requested that the calibration data be included from future workshops. Reference gear sets have also been used for recent workshops and the TMC was asked to disclose the CMIR number, original rating and reference fluid. In addition to other possible scenarios, this study could provide insight to the magnitude and direction in which average carbon varnish ratings change over time.

**Action Item:**

- TMC was asked to disclose the rater ID for the original reference rating to compare to the workshop rerate. If Mr. Lind gets no pushback from any lab today, he would be glad to do this. It looked like no objections.

**Parts Issues related to Rating Workshops**

The TMC reported difficulties in obtaining parts for the prior rating workshop. Typically the host location would work to provide these units which, in many cases, are from prior reference tests. Due to changes in individual policies on post test retention of parts, some labs are not keeping reference gears after they are presented at LRI. This issue isn't captured within the L-60-1 or any other L-test (ex. – L-33-1, L-37, L-42). Used part quality related to the storage environment has also presented difficulties (ex. – rust, dust). The TMC requested panel representatives to bring this issue up with their respective management teams for the purpose of making sure standards are secure for future workshops. The TMC is prepared to bring the issue up at B03 for discussion on possible resolutions if difficulties persist.

**L-60-1 Task Force – Checking Gear Box Dimensions with New Template**

The chairman reported that the revised gear box measurement template was not finished at this time. Mr. De La Fuente is leading the effort to fabricate this.

The meeting was adjourned at 11:11 am (Cory Koglin/Don Lind).

Respectfully submitted,



Chris Schenkenberger  
L-60-1 Surveillance Panel Chairman

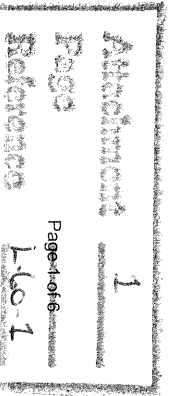
ASTM L-60-1 Surveillance Panel Membership/Mailing List

Meeting Date: February 14, 2007

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\* Initial to indicate attendance at subject meeting



ASTM L-60-1 Surveillance Panel Membership/Mailing List

Meeting Date: February 14, 2007

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Attachment 1  
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Reference L-60-1

\* Initial to indicate attendance at subject meeting

ASTM L-60-1 Surveillance Panel Membership/Mailing List

Meeting Date: February 14, 2007

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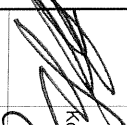

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Attachment 1  
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Reference L-60-1

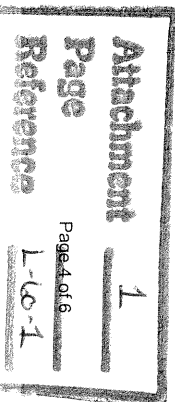
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Initials*	Name	Voting Status	Company Name & Address	Phone & Fax & E-Mail
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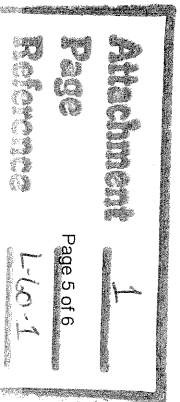


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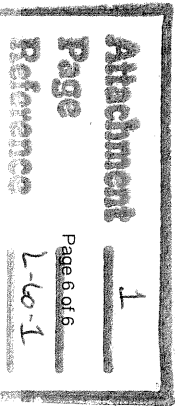


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\* Initial to indicate attendance at subject meeting



**ASTM Gear Calibration Workshop  
San Antonio, TX January 9, 10, & 11, 2007**

**L-60 GEARS Varnish (Large Gear Only)**

RATER																		Original	
SET #	1	4	6	7	10	11	16	22	25	27	29	30	MAX	MIN	AVG	Std Dev	CMIR	OIL	Rating
5	9.35				9.25	9.30	9.40					9.35	9.40	9.25	9.33	0.057	53874	151-2	9.1
6	8.75				8.71	9.05	8.90					9.10	9.10	8.71	8.90	0.174	57173	151-2	8.0
7	8.30				7.95	8.75	9.10					8.95	9.10	7.95	8.61	0.476	60153	151-2	8.0
8	7.85				7.60	8.10	8.00					8.25	8.25	7.60	7.96	0.248	54330	148-1	7.6
9	7.23				8.00	7.85	7.98					8.00	8.00	7.23	7.81	0.331	59184	151-1	7.0
10	7.12				7.54	7.00	7.86					7.50	7.86	7.00	7.40	0.346			
RERAT E																			
R1/6	8.85				8.85	8.95	9.50					9.09	9.50	8.85	9.05	0.271			
R2/8	7.90				7.62	8.25	8.50					8.10	8.50	7.62	8.07	0.335			

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**ASTM Gear Calibration Workshop  
San Antonio, TX January 9, 10, & 11, 2007**

**L-60 GEARS Sludge (Large Gear Only)**

**RATER**

SET #	1	4	6	7	10	11	16	22	25	27	29	30	MAX	MIN	AVG	Std Dev
5	9.75				9.75	9.60	9.63	9.75		9.72	9.53	9.50	9.75	9.50	9.65	0.103
6	9.62				9.59	9.60	9.57	9.62		9.68	9.50	9.44	9.68	9.44	9.58	0.075
7	9.62				9.75	9.60	9.75	9.75		9.67	9.53	9.47	9.75	9.47	9.64	0.107
8	9.75				9.75	9.70	9.75	9.75		9.74	9.50	9.50	9.75	9.50	9.68	0.112
9	9.9				10.00	9.9	9.95	9.66		9.60	9.84	9.85	10.00	9.60	9.84	0.139
10	9.18				9.02	9.18	9.27	8.86		9.23	9.16	9.09	9.27	8.86	9.12	0.132
RERATE																
R1/6	9.62				9.63	9.60	9.65	9.73		9.74	9.67	9.42	9.74	9.42	9.63	0.099
R1/8	9.62				9.75	9.70	9.50	9.75		9.72	9.74	9.50	9.75	9.50	9.66	0.107

Attachment

2

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2073

Reference

L-60-1

Rater 27,28,30, 31 is a new L-37 rater and not considered a category one rater. Please keep this in mind when comparing the rating results.  
Raters 22 and 28 are new L-60-1 raters and not considered a category one rater. Please keep this in mind when comparing the rating results.  
Raters 22, 27 and 31 are new L-33-1 raters and not considered a category one rater. Please keep this in mind when comparing the rating results.  
Raters 22, 27, 28 and 31 are new L-42 raters and not considered a category one rater. Please keep this in mind when comparing the rating results.

<b>Attachment</b>	<u>2</u>
<b>Page</b>	<u>3 of 3</u>
<b>Reference</b>	<u>L-60-1</u>