LDEOC/EOEC SURVEILLANCE PANEL

An LDEOC/EOEC conference call was held on 10-17-24, at 9 am Central Standard Time. The following esteemed members were on the call:

Mike Birke – SwRI Vince Donndelinger - Lubrizol Robert Stockwell – Oronite Laura Birnbaumer - Oronite Kimberly Gutierrez - Intertek Olivia Schmitz - SwRI Jason Bowden – OHT Todd Dvorak – Infineum Joe Franklin – Intertek Ron Shah - Infineum Jo Martinez – Oronite Alisha Hoffman – Savant Kaitlyn Gibson – Valvoline Michelle Holzer – SwRI Michael Shea – ExxonMobil

The purpose of the call was to discuss/approve the HNBR SL107 reference oil targets (below).

	Lower	Mean	Upper
Volume Change, %	3.65	4.13	4.61
Hardness Change, Points	-3	-1.63	0
Tensile Strength Change, %	-7	7.78	22.6
Elongation Change, %	-24.9	2.87	30.7

Vince Donndelinger expressed concern about the disparity in results. After comparing the limits against the raw data, he felt more comfortable. The panel decided to review the limits in 6 months to ensure there has been no shift in data. Joe Franklin made a motion to accept the limits, with a second from Vince Donndelinger. There were no negatives, or abstentions, so the motion passed unanimously. The OHT part number for the HNBR is EOEC-HNBR-A. Jason will send Mike Birke the HNBR formula to add to D7216. Robert Stockwell is going on an archeological adventure to search out the original methodology for determining the EOEC candidate limits. He will share his findings as they become available, as thus far, nobody knows. Jo Martinez, who calculated the total and within lab HNBR standard lab deviations mentioned shed will need one additional data point from each lab to satisfy the six observation requirement. Vince Donndelinger clarified the six observations used in the calculation refer to the number of coupons, not the number of samples. The group agreed, and Jo will reverify the standard deviations before presenting them at the next call. There is over a year supply of the current FKM, so there is no sense of urgency on the proposed replacement FKM2 round robin. OHT has received LDEOC Batch 27 ACM-1, so a round robin is required to determine the volume change correction factor. The round robin instructions are as follows:

Eight sheets of OHT J2643-ACM-2 will be sent out by OHT to each calibrated lab. OHT will contact TMC and the SP chair to inform of the shipping date. There will be **two tests**, one run per bath. Each ACM-1 batch 27 material will be accompanied with a CMIR calibrated ACM-1 batch 26 sample. In the event the data is not reported within 5 weeks from time of sample receipt, the SP will direct the TMC not to assign any future reference oil assignments without SP approval. The purpose of the effort is to create a correction factor, if necessary, not batch approval.

When submitting the results, the correction factor will be applied to only the batch 26 material. Mike Birke will let the labs know when the material has shipped. Mike Birke is in the process of updating D7216 and will share the rewrite with the panel for any comments.

There was no new business, and the meeting adjourned at 9:37 am.

All,

For further clarification on our conversation yesterday. OHT is currently manufacturing the OHTEOEC-FKM2-A material. It should be available by the end of this month. Once the material is available, OHT will notify Mike and send the donated samples to the labs for testing.

Please find below the current inventory levels of OHTEOEC-FKM-A, based on an annual consumption rate.

OHTEOEC-FKM-A	
BATCH CODE	EST. MONTHS REMAINING (Annual Consumption Rate)
31 (current)	5 MONTHS
32	12 MONTHS

I hope this information helps. If you have any questions, please do not hesitate to contact me.

Best regards,

Jason H. Bowden OH Technologies, Inc.

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Subject: RE: 10-17-24 EOEC SP Call Minutes Attached

Esteemed Surveillance Panel Chair,

I would like to push back on "no sense of urgency on the proposed replacement FKM2 round robin." Technology Demonstration for PC12 starts in just over two short months and that "year – current batch and one being shipped to OHT" could be consumed quicker than estimated. New seal round robins, the statistical analysis of that data and acceptance by the Surveillance Panel does take some time so while not an emergency, the replacement FKM2 work should proceed as soon as it is possible.

Thank you for your consideration, Laura Birnbaumer Automotive Engine Oil Product Adaptation and Qualification Program Manager labi@chevron.com

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