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Unapproved Minutes of the August 1, 2003  
Sequence III Surveillance Panel Teleconference

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Attendees: Bill Nahumck, Monica Beyer, Lew Williams, Phil Scinto, Don Bryant, Gordon Farnsworth, Mike Kasimirsky, Bob Campbell, Irwin Goldblatt, Dwight Bowden, Jason Bowden, Adam Bowden, Mark Cooper, Tim Caudill, Charlie Leverett, Tom Franklin, Pat Lang, Sid Clark, Bob Olree, Hanna Murray

Meeting was called to order at 10:05 ET on 8-1-03.

The meeting started with a review by Sid Clark of the request that came from the ILSAC/Oil meeting related to an ACC proposal for dealing with the recent issue related to the compression ring roughness and oil consumption concerns. There has been a recall instituted by GMR and OHT for the second compression ring of Batch 2 and the 5 and 6 size of Batch 3 rings. Based on data released by the IIIG Test Development Group, the visually rougher rings have shown a greater tendency for higher oil consumption that have the potential to create a significant amount of non-interpretable test results. The "smoother" rings are less prone to higher oil consumption and closer match the performance demonstrated in the Precision Matrix. These recalled rings will be inspected, sorted, characterized and processed by OHT with the rings meeting the lower end of the acceptance range for roughness being retained and

redistributed as acceptable for testing. ILSAC/Oil would like the Sequence IIIF/G Surveillance Panel to endorse their proposal of establishing a modification to the specification for the surface roughness for the second compression ring to reduce the average oil consumption for the IIIG test. They would like the Surveillance Panel to match the ring roughness that has provided acceptable oil consumption to be able to meet the non-interpretability criteria of 4.65L. If this is agreeable to the Surveillance Panel (SP) with adequate parts availability, then ACC will then endorse test registration.

Dwight gave the attendees an update as to the status of the recall and ring situation. The rings were taken to the vendor on 7-31-03 and the sorting has begun. The 200 sets of each ring size at the vendor are OHT inventory as it will be quicker to process OHT inventory first and then substituted laboratory inventory from verified rings. All of the rings meet the current GM print specification for the test part. To obtain the surface finish the Panel has requested that the process and/or print for future 2<sup>nd</sup> compression rings will need to be revised. Currently, there is no Ra specification for the surface finish for the O.D. of any of the compression rings, which would be measured before the phosphate process. If Ra measurements are taken by the lab of the finished part, the Ra measurements may be misleading due to the Phosphate coating. The 5 and 6 size of Batch 3 rings is expected to be done by the end of the week of 8-3-03. Sizes 1 through 4 for Batch 3 rings have not been done yet. The yield for these sizes won't be known for a while. Once these parts are inspected and characterized, OHT will be able to suggest to GMR a print modification of the second compression ring for IIIG test. Dwight advised us that a precaution, OHT has already place an order to put new material in process as it will take 6-8 weeks to totally process the rings. The earliest the new material can be expected is mid-September. The final processing will incorporate the revised print. **In the meantime, the original recall has been amended. Each test lab is requested to return the laboratory inventory of ALL second compression rings to OHT ASAP. Each lab is required to make sure the parts are properly labeled and identified so that replacement parts can be properly distributed as they become available.**

With this background, a **motion was made** by Dwight Bowden and seconded by Sid Clark to have the Sequence IIIF/G Surveillance Panel adopt the plan proposed by OHT to inspect, sort, characterize and process all second compression rings from Batch 2 and 3 to obtain sufficient quantity of acceptable rings and to develop the necessary criteria for producing future second compression ring batches to an effort to improve the ability to control oil consumption. The Surveillance Panel chairman is to notify ACC of our actions and endorsement of the proposal by ACC at the ILSAC/Oil meeting of 7-29-03. The chairman is also requested to keep ACC informed as to the status of the processing and progress of the new material for testing. Size 5 & 6 rings from Batch 3 could be available by the end of the week of 8-3-03. If replacement rings are required for sizes 1 through 4, the earliest replacement rings would be available would be mid-September 2003. The motion passed with a vote of 11 for, 0 against and 1 waives (TMC).

The discussion proceeded to the additional items that were agenda items. Michael Kasimirsky reviewed his concern and difficulty with issues related to MRV TP1 results reported for the Sequence IIIG test. Several members expressed their concern about how we are to develop a severity adjustment and LTMS around the MRV parameter. Additional input is needed to from groups like Chris May's to better understand the test and a valid approach to developing a severity adjustment, if possible. A **motion was made** by Charlie Leverett and seconded by Pat Lang to make the MRV parameter a record only parameter for the reference tests until a correction factor proposal is available and approved. The motion passed with a vote of 11 for, 0 against and 1 waives (TMC).

There is a small task force, comprised of Lew Williams, Cliff Vernier, Gordon Farnsworth and Jim Williams, will work with the industry statisticians to develop correction equations for viscosity increase and MRV based on oil consumption. When these are ready, the SP will need to meet and review the application of these factors. It may affect how we apply a severity adjustment to the MRV parameter. The SP agreed that when correction factors for these parameters are finalized, that they will be applied to all reference tests.

It was noted that ILSAC/Oil have agreed upon the accepted IIIG pass/fail criteria which has eliminated Average Piston Varnish (APV). At an earlier meeting the Surveillance Panel had agreed that if a pass/fail parameter is dropped, then the SP would no longer monitor that parameter in LTMS. A **motion was made** by Charlie Leverett and seconded by Pat Lang to drop the APV as a LTMS parameter. The motion passed with a vote of 11 for, 0 against and 1 waives (TMC).

The TMC reviewed the status of the reference oil testing. The SP has previously approved to reestablish the reference oil targets at 10, 20 and finally at 30 tests. The TMC noted that there were currently 11 tests on RO 434, 12 tests on RO 435 and 12 tests on RO 438. Some labs noted that they had some tests that were waiting on MRV tests and since the MRV has been temporarily listed as "report only", would like to have their data included in the new targets. A **motion was made** by Mike Kasimirsky and seconded by Dwight Bowden to establish the new reference test targets using all valid reference tests as of close of business on 8-5-03. The motion passed with a vote of 12 for, 0 against and 0 waives. The matrix runs are to be evaluated as normal reference oil tests and their acceptability would be determined from that review, similar to what was done for the IIIF matrix.

Sid Clark agreed to work with the San Antonio labs to summarize modifications that have been done by the Precision Matrix labs. The addition of a watt meter is needed for the Sunnen honing machine to provide assurance that the all labs are using the proper honing method. Charlie Leverett has agreed to lead a Honing Task Force (HTF) to evaluate the current specified procedure. He will use the method specified for the test and some controlled modifications to determine if any changes can be incorporated to the honing procedure to enhance oil consumption control. He will issue a request to labs to supply cylinder surface finish information and also do a Round Robin on the different surface finish measurement equipment currently used in the industry. The need for a build workshop was discussed and it was decided to wait on the outcome of the HTF before scheduling.

Charlie Leverett voiced concern over the continued use of RO 1006 as a reference oil for Sequence IIIF qualifications. A **motion was then made** by Charlie Leverett and seconded by Pat Lang to remove only RO 1006 (not 1006-2) from use as a reference oil for the Sequence IIIF test. The motion passed with a vote of 11 for, 0 against and 1 waives (TMC).

The meeting was adjourned at approximately 11:20 AM. The next meeting will be at the call of the chairman.

*William Nahumck*

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