



# Test Monitoring Center

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MEMORANDUM: 01-127

DATE: October 4, 2001

TO: Sequence VIII Surveillance Panel

FROM: Michael T. Kasimirsky

SUBJECT: Stripped Viscosity Round Robin Results

As you know, the Sequence VIII Surveillance Panel has been working for some time now on a Stripped Viscosity Round Robin procedure to quantify any differences between the stripped viscosity results at the various Sequence VIII test labs. The initial investigations have consisted of sending out used oil samples to the various labs for stripped viscosity testing. The first round consisted of two samples per lab, both taken from the same used oil sample, which were stripped at the lab and then the viscosity was measured. The second round consisted of samples taken from a second used oil sample which was stripped by PerkinElmer Automotive Research prior to industry-wide distribution for viscosity measurement. The results of both of these activities have already been presented to the Surveillance Panel. The latest round consisted of sending a sample from the first used oil sample to PerkinElmer Automotive Research for stripping prior to distribution to the testing labs for viscosity measurement. The individual test labs did only viscosity measurements during the last two rounds; the stripping procedure was not performed. The results of all of these activities are shown below.

Round 1 – Individually Stripped Used Oil Samples			
Lab	Sample	Oil	SVIS
A	A1*	X	8.94
A	A2*	X	8.94
A	B1*	X	8.93
A	B2*	X	8.94
B	A	X	9.14
B	B	X	9.02
D	A	X	8.88
D	B	X	8.92

\*Lab A analyzed both samples twice.

Round 2 – Pre-Stripped Used Oil Samples			
Lab	Sample	Oil	SVIS
A	C	Y	10.30
B	C	Y	10.36
D	C	Y	10.33

Round 3 – Pre-Stripped Used Oil Samples			
Lab	Sample	Oil	SVIS
A	D	X	9.04
B	D	X	9.00
D	D	X	9.03

From the results of Round 3, it appears that there may be some differences in the stripping procedure used at the various laboratories in industry. The Round 3 results, which used samples stripped prior to distribution, do not show as wide a variation as the Round 1 results, which were stripped independently by each test lab, when compared across laboratories.

This exercise was done as part of an investigation into the desirability of establishing a permanent round robin testing protocol in the Sequence VIII test. This protocol would be used to assure that the stripped viscosity results in Sequence VIII testing, which are a pass-fail parameter, are accurate and representative of the performance of the oil being tested. The Sequence VIII panel will need to readdress this topic at the next upcoming meeting and decide upon a course of action.

MTK/mtk

c: <ftp://www.tmc.astm.cmri.cmu.edu/docs/gas/sequenceviii/memos/mem01-127>