Test Monitoring Center
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MEMORANDUM: 01-143

DATE: October 29, 2001

TO: Ted Selby, Chair D02.B07
Cliff Venier, Chair D02.B07 Engine Oil Volatility Panel
Susan Milczewski, Chair D02.B07 Engine Oil Oxidation Deposits Panel
Mark Devlin, Chair D02.B07 Gelation Index Panel
Frank Gotto, Chair High Temperature Foam Panel

FROM: Tom Schofield

SUBJECT: Change in TMC Statistical Report Period

I have attempted to reach each of you by telephone last week to inform you of a change in the TMC report period for our semiannual reports to D02.B07. In the past, I have reported to B07 every six-months, but used a year's worth of calibration data in my reports. Thus the data used to generate my June reports overlapped the data used for my December reports by six-months. Initially, this was done to increase the sample size each report period to a statistically significant number of data points. However, this has also been a maintenance challenge for me because I have had to maintain two documents (and the supporting data analyses) in a consistent format, one that lists summary tables for year periods April through March, and another that lists tables for year periods October through September.

Now that the number of bench tests reported to the TMC each period have increased over time, we generally have enough data reported to the TMC every six-months to be able to perform significant statistical summaries over that interval (except for D5480, which now is down to one lab calibrating four times a year). After consultation with John Zalar and Ted Selby, we have agreed that, starting with this latest report period, all D02.B07 monitored tests will be statistically summarized in six-month intervals rather than one-year intervals. That is, my June 2001 report covered the year interval April 1, 2000 through March 31, 2001. For my December 2001 report, I will review and summarize the data for April 1, 2001 through September 30, 2001 (a six-month interval). Subsequent reports will build on the six-month interval comparisons.

This change will advantage me by significantly reducing the maintenance required for these reports, while not compromising the integrity of the summaries. It also has the advantage of fitting in with our engine test report intervals, and will align more conveniently with our established data analysis software protocols. The advantage to the section recipients of the report will be consistent six-month reports looking at independent data sets each report period. Each period can then be conveniently

compared to previous periods every six-months, rather than every year. There will not be a problem trying to compare performance over different year intervals as there is presently when trying to compare my June reports (April through March intervals) to my December reports (October through September intervals). This may also result in improved monitoring as we might be able to quantify performance shifts over shorter intervals. Of course, should longer periods of analysis be required in order to stress any technical issues, they will be presented that way as supplements to the report.

BRT and Filterability areas are already being monitored using data collected over six-month intervals.

Please direct any inquiries you might have on this subject to my attention.

TMS/tms

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