

| MEMORANDUM: | 07-089 |
|--------------|---|
| DATE: | December 3, 2007 |
| TO: FROM: | Charlie Leverett Chairman, Sequence VIB Surveillance Panel Chair Richard Grundza |
| SUBJECT: | Sequence VIB Reference Oil Tests Statistics, Reference Oil 539 |

The following are the statistics for Sequence VIB reference oil 539, based on 7 test results. These targets are effective for reference oil tests completing on or after December 3, 2007. Targets were calculated using severity adjusted results.

| Parameter | Mean | Standard Deviation | |
|-----------|------|--------------------|--|
| FEI1 | 0.91 | 0.22 | |
| FEI2 | 0.33 | 0.21 | |

Figures 1 and 2 plot the results by laboratory and the Shewhart acceptance ranges for FEI1 and FEI2, respectively. Please note that laboratory results in Figures 1 and 2 have not been severity adjusted. Figure 3 summarizes both the uncorrected and corrected results, where appropriate.

Attachments

REG/reg

c: Sequence VIB Surveillance Panel Sequence VIB Test Engineers John Zalar, TMC Frank Farber, TMC <u>ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/memos/mem07-089.pdf</u>

Distribution: email

Figure 1

Sequence VIB (Reference Oil 539) Test Target Data Set and Shewart Severity Limits

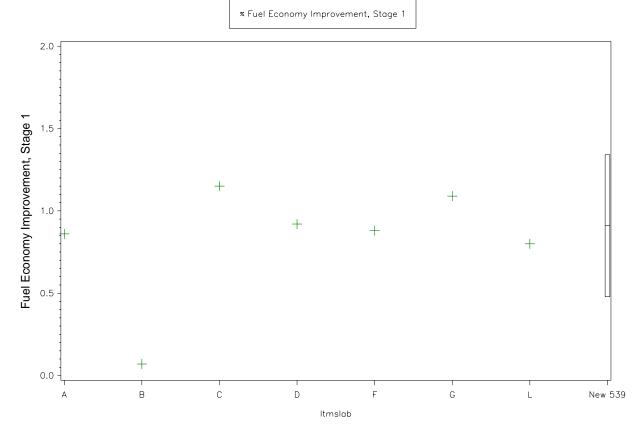
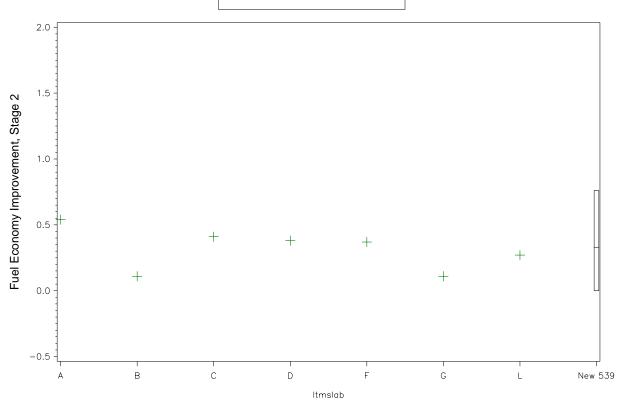


Figure 2

Sequence VIB (Reference Oil 539) Test Target Data Set and Shewart Severity Limits

≈ Fuel Economy Improvement, Stage 2



| Figure | 3 |
|--------|---|
| | - |

| Lab | FEI1 | SA | Corrected | FEI2 | SA | Corrected |
|-----|-------|------|-----------|-------|------|-----------|
| | | | FEI1 | | | FEI2 |
| F | 0.18 | 0.88 | 1.06 | -0.15 | 0.37 | 0.22 |
| А | 0.02 | 0.86 | 0.88 | 0.22 | 0.54 | 0.76 |
| D | 0.07 | 0.92 | 0.99 | 0.02 | 0.38 | 0.4 |
| G | 0.14 | 1.09 | 1.23 | -0.06 | 0.11 | 0.05 |
| L | 0.21 | 0.8 | 1.01 | 0.04 | 0.27 | 0.31 |
| В | -0.08 | 0.07 | -0.01 | -0.08 | 0.11 | 0.03 |
| С | 0.04 | 1.15 | 1.19 | 0.14 | 0.41 | 0.55 |