



MEMORANDUM: 05-002

DATE: January 13, 2005

TO: Sequence VIII Surveillance Panel

FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*

SUBJECT: Reference Oil 1009 Test Targets

On January 7, 2003, the panel successfully approved an electronic ballot to the Sequence VIII Surveillance Panel on introducing reference oil 1009 into the LTMS. The motion also specified that these targets be updated when 10, 20, and 30 data points become available, as is normal practice. The TMC currently has 11 data points on this oil and as such has sufficient data to update the test targets at this time. The updated test targets are shown below:

| Parameter | Mean | Standard Deviation |
|-----------|------|--------------------|
| BWL | 13.8 | 2.14 |
| SVIS | 9.51 | 0.10 |

Any applicable severity adjustments were applied to the data prior to target generation. The data used to generate these targets is shown in Tables 1 & 2. Table 2 contains severity-adjusted data with the adjusted parameters, if any, shown in *red italics*. The above test targets, as well as the severity-adjusted data used to generate them and the raw test targets, are shown in the following figures. Figure 1 shows the BWL data, raw targets, and severity-adjusted targets. Figure 2 shows the SVIS data and raw test targets (SVIS is not a severity-adjusted parameter).

These targets are in effect for all tests completed on or after January 24, 2005.

MTK/mtk

Attachments

c: John L. Zalar, TMC
<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceviii/memos/mem05-002.pdf>

Distribution: Electronic Mail

Table 1 – Unadjusted Data

| OILCODE | LTMSLAB | LTMSAPP | IND | VAL | LTMSDATE | LTMSTIME | BWL | SVIS |
|---------|---------|---------|------|-----|------------|----------|------|------|
| 44880 | D | 1 | 1009 | AG | 7/12/2002 | 9:20 | 10.9 | 9.37 |
| 54208 | D | 1 | 1009 | AC | 12/17/2004 | 10:35 | 14 | 9.51 |
| 44891 | B | 4 | 1009 | AG | 12/8/2002 | 21:55 | 11.4 | 9.64 |
| 44892 | B | 3 | 1009 | AG | 12/1/2002 | 19:45 | 12 | 9.56 |
| 44893 | B | 4 | 1009 | AC | 2/5/2004 | 11:15 | 14.7 | 9.62 |
| 51155 | B | 3 | 1009 | AC | 8/5/2004 | 10:15 | 13.4 | 9.52 |
| 52644 | B | 4 | 1009 | AC | 1/5/2005 | 15:45 | 14.1 | 9.65 |
| 44922 | A | 3 | 1009 | AG | 7/1/2002 | 15:44 | 13.7 | 9.45 |
| 44923 | A | 4 | 1009 | AG | 8/16/2002 | 14:47 | 15.8 | 9.51 |
| 44924 | A | 4 | 1009 | AC | 1/25/2004 | 12:00 | 13 | 9.41 |
| 46570 | A | 5 | 1009 | AC | 9/18/2004 | 10:09 | 12.6 | 9.39 |

Table 2 – Severity Adjusted Data

| OILCODE | LTMSLAB | LTMSAPP | IND | VAL | LTMSDATE | LTMSTIME | BWL | SVIS |
|---------|---------|---------|------|-----|------------|----------|-------------|------|
| 44880 | D | 1 | 1009 | AG | 7/12/2002 | 9:20 | 10.9 | 9.37 |
| 54208 | D | 1 | 1009 | AC | 12/17/2004 | 10:35 | 14 | 9.51 |
| 44891 | B | 4 | 1009 | AG | 12/8/2002 | 21:55 | 11.4 | 9.64 |
| 44892 | B | 3 | 1009 | AG | 12/1/2002 | 19:45 | 12 | 9.56 |
| 44893 | B | 4 | 1009 | AC | 2/5/2004 | 11:15 | 17.7 | 9.62 |
| 51155 | B | 3 | 1009 | AC | 8/5/2004 | 10:15 | 16.4 | 9.52 |
| 52644 | B | 4 | 1009 | AC | 1/5/2005 | 15:45 | 14.1 | 9.65 |
| 44922 | A | 3 | 1009 | AG | 7/1/2002 | 15:44 | 13.7 | 9.45 |
| 44923 | A | 4 | 1009 | AG | 8/16/2002 | 14:47 | 15.8 | 9.51 |
| 44924 | A | 4 | 1009 | AC | 1/25/2004 | 12:00 | 13 | 9.41 |
| 46570 | A | 5 | 1009 | AC | 9/18/2004 | 10:09 | 12.6 | 9.39 |

Figure 1

Sequence VIII Reference Oil 1009
Test Target Data Set and Proposed Shewhart Bands

Bearing Weight Loss, in mg

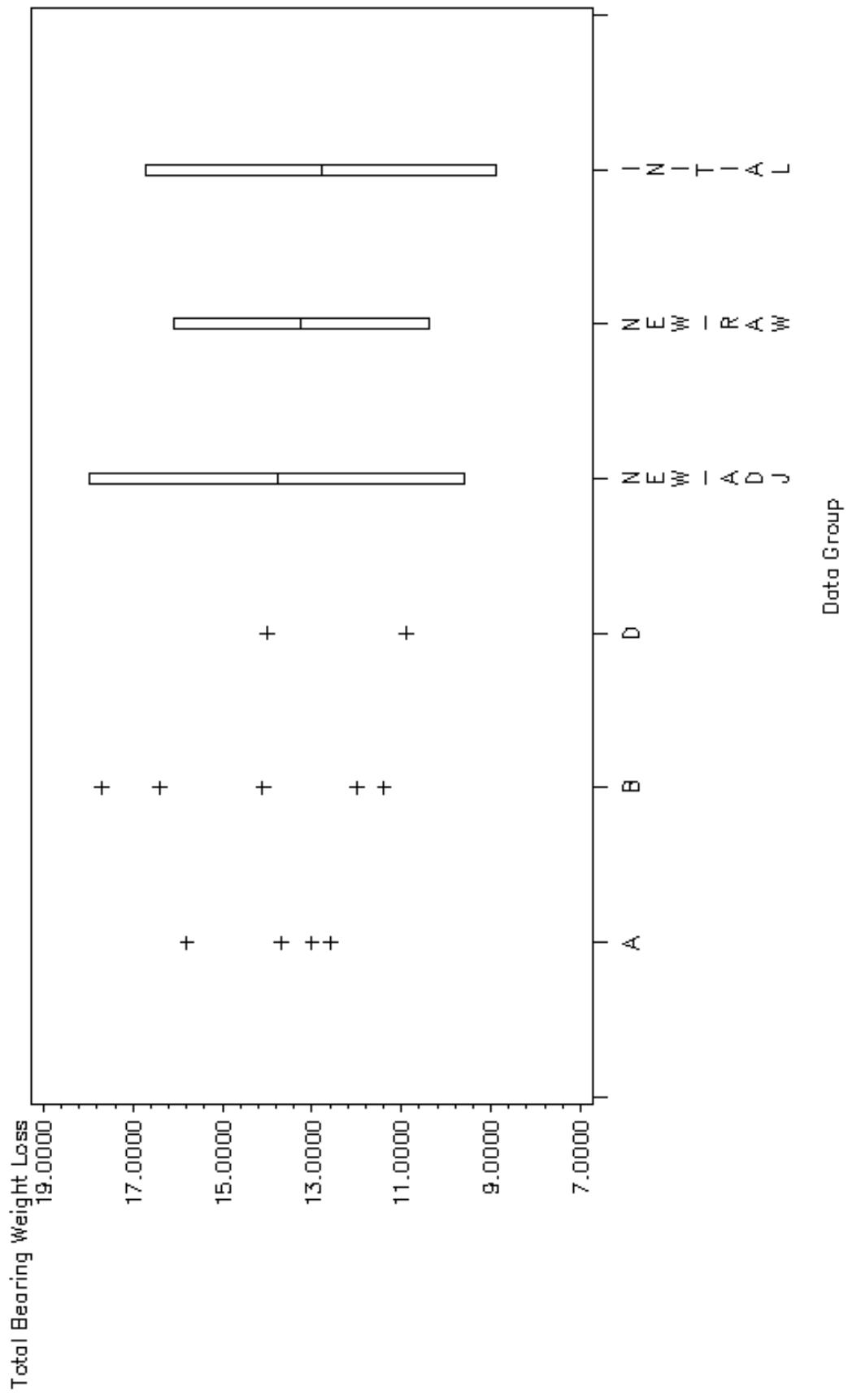


Figure 2

Sequence VIII Reference Oil 1009
Test Target Data Set and Proposed Shewhart Bands

Stripped Viscosity, in cSt

