Test Monitoring Center
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MEMORANDUM: 02-005

DATE: February 11, 2002

TO: Sequence IVA Surveillance Panel

FROM: Michael T. Kasimirsky

SUBJECT: Reference Oil 1006-2 Initial Test Targets

At the November 15, 2001 meeting of the Sequence IVA Surveillance Panel, the panel approved a plan to run a series of donated tests on reference oil 1006-2 for the purposes of test target generation. This data would be used to set the initial test targets on this reference oil. The targets would subsequently be updated when 10, 20, and 30 total data points became available and frozen after the final update.

Preliminary results showed that this reference oil was generating results significantly milder than the previous blend of this oil. Chairman Bendele expressed concern over the potential test targets resulting from this preliminary data set and asked that this issue be reviewed before going forth with the previous plan. The TMC generated test targets based upon the six available donated tests, both with and without severity adjustments applied. These were distributed and discussed during a conference call of laboratory engineers that was previously scheduled for discussion of Rocker Arm Cover cooling issues held on January 31, 2002. The general consensus of the Chairman and the laboratory engineers was to introduce this reference oil using the severity adjusted target mean generated from the donated test data but to use the current standard deviation for reference oil 1006 for the initial targets. The targets would then be updated at 10, 20, and 30 data points as previously planned. Since this plan deviated from the plan originally approved by the Surveillance Panel, panel approval was necessary before it could be implemented.

On February 1, 2002, an E-ballot was sent out to the Surveillance Panel asking for approval of this revised plan. The ballot was approved on February 8, 2002, with a final tally of eight votes for the plan, no votes against the plan, and three voters responding but abstaining from voting. The approved test targets for reference oil 1006-2 are shown in the following table, along with the latest targets for reference oil 1006 for comparison purposes:

Reference Oil	Mean	Standard Deviation
1006-2	88.74	12.50
1006	121.76	12.50

The test target mean was generated with severity adjustments applied to the test results. The targets are to be updated at 10, 20, and 30 data points and these future updates will incorporate severity adjustments on the data before target means and standard deviations are calculated.

These test targets for reference oil 1006-2 are effective for all tests completed on or after February 11, 2002.

The new targets for reference oil 1006-2 are shown in the attached plot. Also shown on the same plot is the raw and severity adjusted targets based upon the test data and also the three different test

targets used for reference oil 1006 in the Sequence IVA test area. Tables showing the raw and severity adjusted data are also attached.

MTK/mtk

Attachments

c: John L. Zalar, TMC
ftp://www.tmc.astm.cmri.cmu.edu/docs/gas/sequenceiii/memos/mem02-005.pdf

Distribution: Electronic Mail

Sequence IVA Reference Oil 1006–2

Test Target Data Set and Shewhart Bands

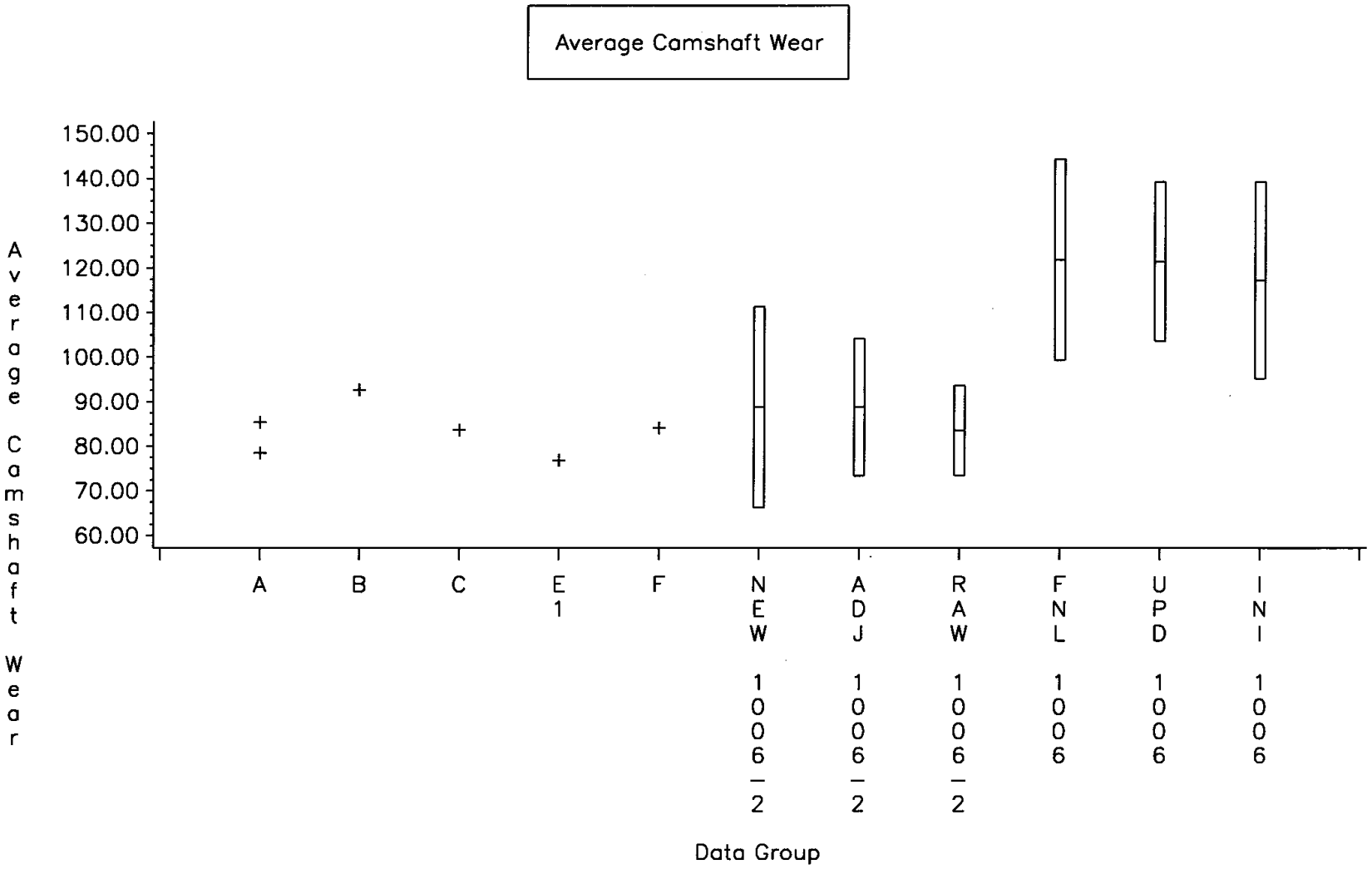

Table 1 – Raw Reference Oil 1006-2 Data

OILCODE	LAB	STAND	IND	VAL	LTMSDATE	LTMSTIME	ACW
42524	C	1	1006-2	NI	1/18/2002	14:37	83.58
42521	B	1A	1006-2	NI	1/11/2002	21:14	92.64
42516	E1	1	1006-2	NI	1/13/2002	14:13	76.85
42526	F	1	1006-2	NI	1/14/2002	7:10	84.08
42518	A	4	1006-2	NI	12/11/2001	21:45	85.36
42519	A	3	1006-2	NI	1/27/2002	2:30	78.44

Table 2 – Severity-Adjusted Reference Oil 1006-2 Data

OILCODE	LAB	STAND	IND	VAL	LTMSDATE	LTMSTIME	ACW
42524	C	1	1006-2	NI	1/18/2002	14:37	83.58
42521	B	1A	1006-2	NI	1/11/2002	21:14	92.64
42516	E1	1	1006-2	NI	1/13/2002	14:13	89.42
42526	F	1	1006-2	NI	1/14/2002	7:10	103.03
42518	A	4	1006-2	NI	12/11/2001	21:45	85.36
42519	A	3	1006-2	NI	1/27/2002	2:30	78.44