



Test Monitoring Center

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MEMORANDUM: 01-035

DATE: April 11, 2001

TO: Ed Callis, Chairman, ASTM Section D02.B0.06

FROM: Richard E. Grundza

SUBJECT: Two-Stroke-Cycle Reference Test Status from October 1, 2000 through March 31, 2001

Status

RING STICKING (D 4857)

Three calibration results and sixteen non-reference oil results were reported from one laboratory during the period ending March 31, 2001. One of the three calibration tests was unacceptable due to second ring sticking results which differed by greater than 1 merit unit. Figures 1 and 2 plot the summation delta/s for Second Ring Sticking and Piston Skirt Varnish of both the calibration attempts and the reference oil results obtained with reference oil 606, run to evaluate the performance of non-reference oils. Figure 1 shows severity trending mild for the period. The target values used for plotting purposes are the mean values used to generate the correction factor to be applied to reference oil 606, when run for non-reference oil evaluation. Figure 2 plots the summation delta/s for Piston Skirt Varnish for the period ending March 31, 2001. Figure 2 shows Piston Skirt Varnish began the period on target, but shifted severe midway through the period.

TIGHTENING TEST (D 4863)

A total of one reference oil and one non-reference oil test were reported to the Test Monitoring Center during the period ending March 31, 2001. Figures 3 plots the summation delta/s from target for the delta torque drops for the performance of reference oil 600 versus reference oil 604-1. The plot shows a mild trend, based on this result and results from previous periods.

PREIGNITION TEST (D 4858)

There were no preignition reference results reported this period.

Information Letters

One information letter was issued during this report period. Information Letter 01-1 was issued on January 2, 2001. This information letter corrected a typographical error in Annex A2. of Test Method D4857, for sulfated ash.

Summary

Results with Test Method D 4857 showed Piston Skirt Varnish on target at the beginning of the period before trending severe midway through the period. Second Ring Sticking trended mild for the period. Tests run in accordance with D 4858 show results with reference oil 600 relative to reference oil 604 were mild for the period.

REG/reg

Attachments

c: F. M. Farber, TMC

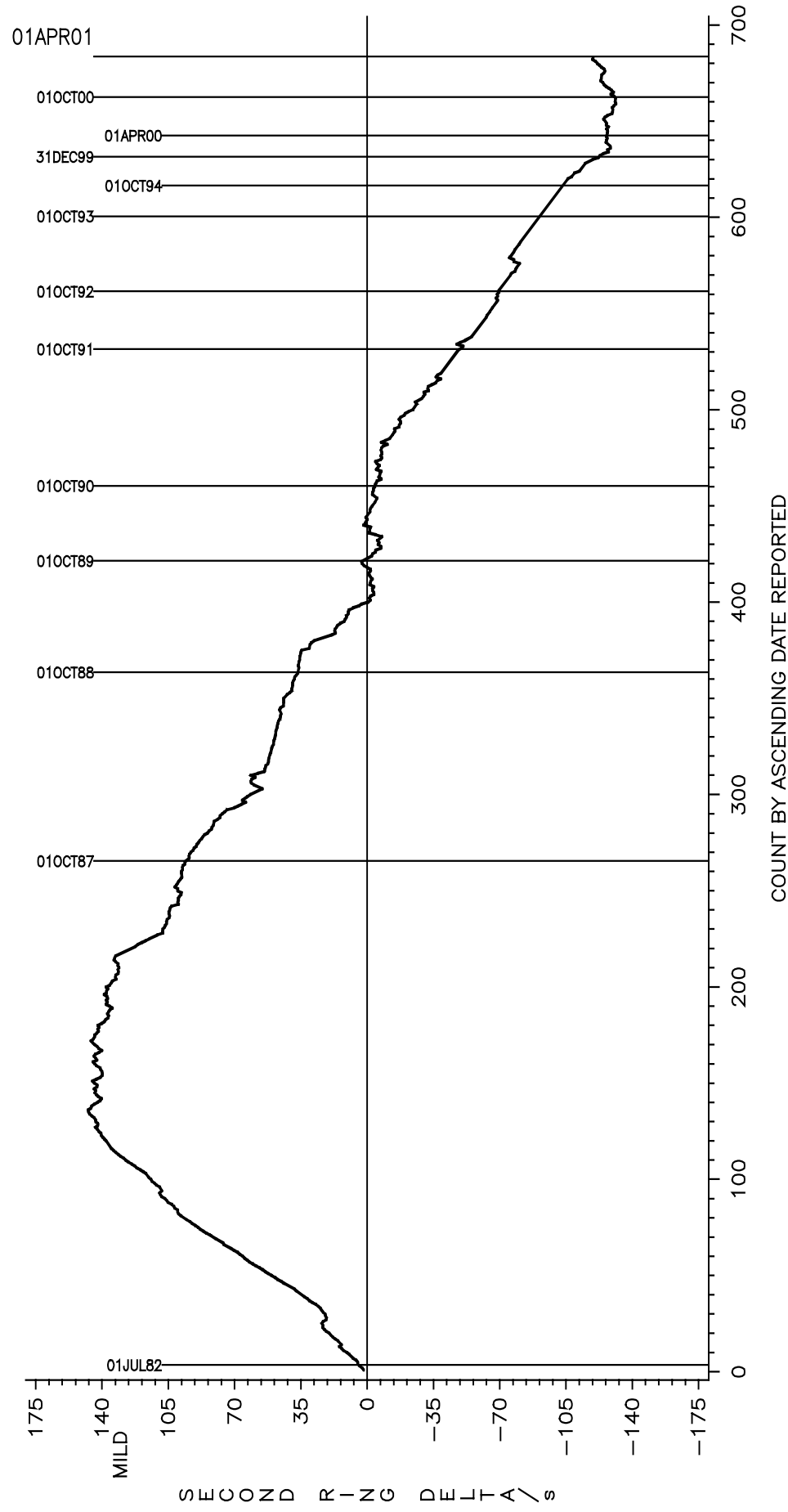
J. L. Zalar, TMC

Two-Stroke-Cycle Mailing List

<ftp://www.tmc.astm.cmri.cmu.edu/docs/gas/tc/semiannualreports/tc-4-2001>

FIGURE 1

TWO-STROKE-CYCLE
RING STICKING TEST (D 4857)
CUSUM PLOT OF SECOND RING STICKING
Using Updated Targets after 4/1/00

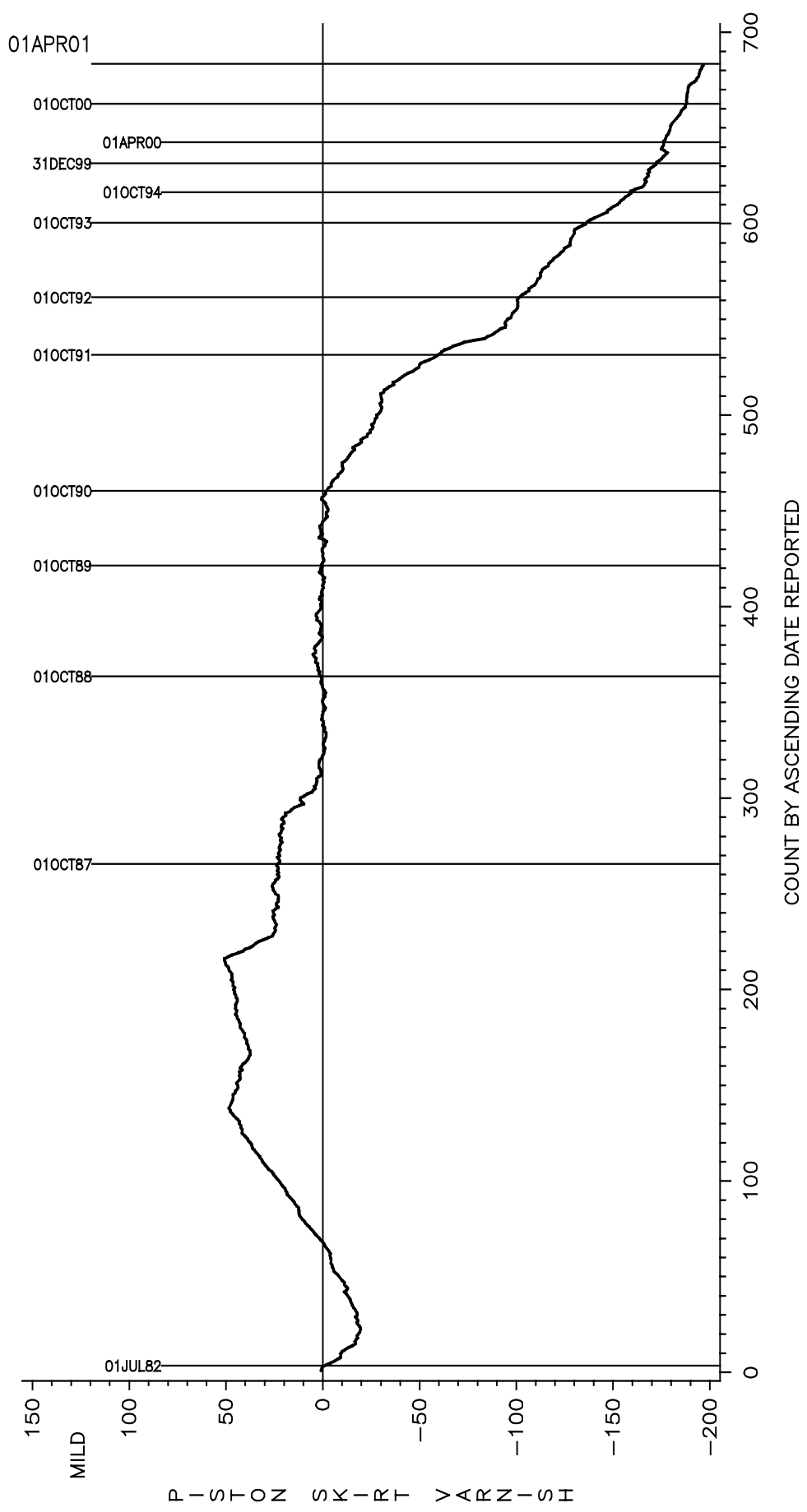


Test Targets Based on Data Reported Prior to 10/16/90 for Reference Oil 600
Test Targets for Reference Oil 606 is the Mean of the Data Used to Develop the Correction Factor

SEVERE

FIGURE 2

TWO-STROKE-CYCLE
RING STICKING TEST (D 4857)
CUSUM PLOT OF PISTON SKIRT VARNISH
Using Updated Targets After 4/1/00



TEST TARGETS BASED ON DATA REPORTED PRIOR TO 10/16/90 for Reference Oil 600
Tests Targets for Reference Oil 606 is the Mean of the Data Used to Develop the Correction Factor

SEVERE

FIGURE 3

TWO-STROKE-CYCLE
STANDARD TEST METHOD FOR DETERMINATION OF LUBRICITY
OF TWO STROKE CYCLE GASOLINE ENGINE LUBRICANTS (D 4863)
MEAN TORQUE DROP OF OIL VI-EE, (TMC 604) RELATIVE TO VID (TMC 600)

