



Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
(412) 365-1000

MEMORANDUM: 04-067
DATE: October 1, 2004
TO: Warren Totten, Chairman, Cummins Surveillance Panel
FROM: Jeff Clark
SUBJECT: M11EGR Calibration Testing for the October 2004 ASTM Report Period

The following is a summary of M11EGR reference oil tests completed during the October 2004 ASTM report period, which began on April 1, 2004 and ended on September 30, 2004.

Test Status	TMC Validity Code	Number of Tests
Acceptable Calibration Test	AC	1
Failed Calibration Test (LTMS Criteria)	OC	1
Operationally Invalid Calibration Test	LC	0
Aborted Calibration Test	XC	0
Total		2

The failed calibration test was due to extremely severe Crosshead Weight Loss.

Severity and Precision:

Figures 1, 2, and 3 (attached) show the current industry EWMA severity, EWMA precision, and cusum charts for Crosshead Weight Loss (CWL), Filter Plugging Delta P (FPD), and Average Sludge Rating (ASR). CWL and ASR have sounded industry severity and precision alarms. Low-test activity makes it difficult to offer any meaningful commentary regarding these trends. For more information, please refer to the industry alarm logs available on the TMC web site.

Precision, as estimated by the pooled standard deviation, is shown in the table below. Precision estimates are presented on an annual basis and no estimate is available for 2004. Also, any conclusions drawn from a comparison between current and previous precision estimates are of little value due to the reduced number of degrees of freedom. Please note, that the degrees of freedom (df) equals $\Sigma(n$ observations per oil - 1).

M11EGR Pooled Precision By Year

Parameter	2001	2002	2003	2004
df	11	13	53	-
CWL	3.12	3.19	2.63	n/a
FPD	0.85	0.98	1.08	n/a
ASR	0.33	0.64	0.84	n/a

Reference Oils:

The current reference oil test targets are shown below:

Oils	N	Parameter	Mean (cSt)	S
830-2	10	CWL	12.2	3.2
		ASR	8.40	0.36
		FPD	11.9121	1.0554

Once 20 tests have been completed on oil 830-2, the TMC will provide a target update for surveillance panel consideration. To date, 18 tests have been completed on oil 830-2.

Information Letters:

No information letters were issued this ASTM period.

TMC Laboratory Visits:

No TMC laboratory visits were conducted this ASTM period.

Additional Information:

The M11EGR database, timeline, and alarm logs can be accessed on the TMC's homepage. If you have any questions on how to access this information, contact the TMC.

JAC/jac/mem04-067.jac.doc

Attachments

c: J.L. Zalar, TMC

F.M. Farber, TMC

Cummins Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/diesel/cummins/semiannualreports/M11EGR-10-2004.pdf>

Distribution: Email

FIGURE 1
M1IEGR INDUSTRY OPERATIONALLY VALID DATA

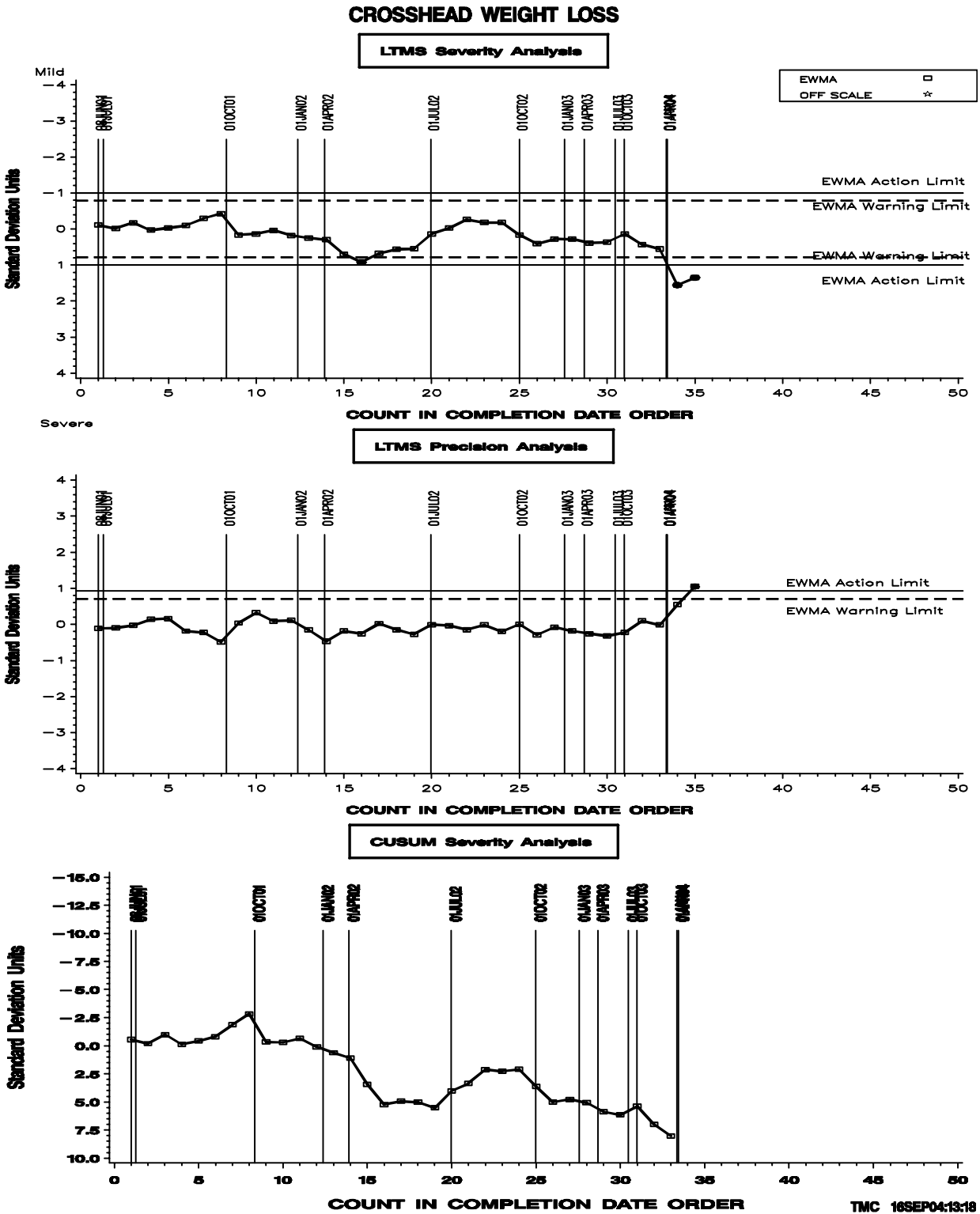


FIGURE 2
M1IEGR INDUSTRY OPERATIONALLY VALID DATA

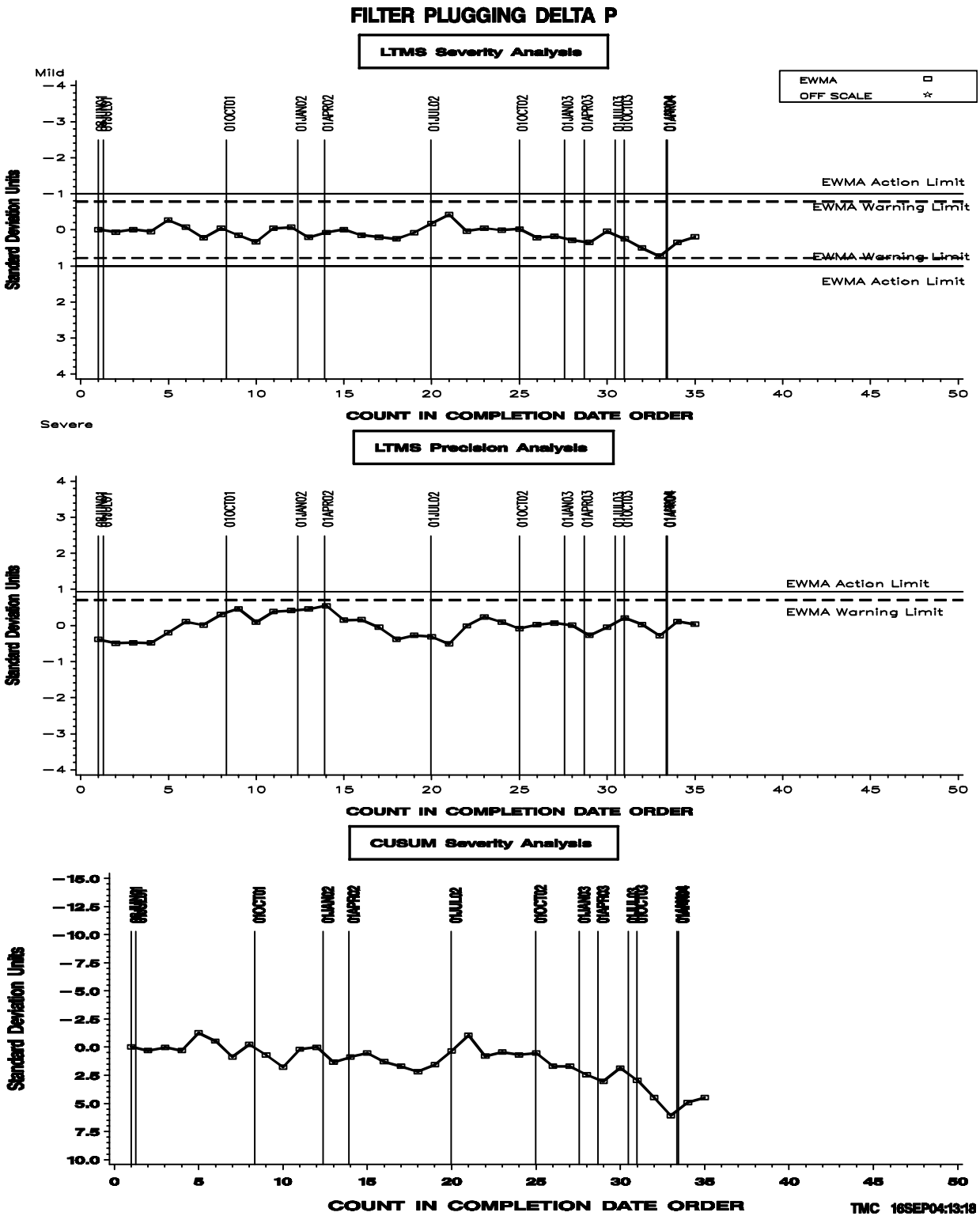


FIGURE 3
M1IEGR INDUSTRY OPERATIONALLY VALID DATA

