



Test Monitoring Center

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MEMORANDUM: 06-014
DATE: April 4, 2006
TO: Warren Totten, Chairman, Cummins Surveillance Panel
FROM: Jeff Clark
SUBJECT: ISM Calibration Testing for the April 2006 ASTM Report Period

The following is a summary of ISM reference oil tests completed during the April 2006 ASTM report period, which began on October 1, 2005 and ended on March 31, 2006.

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

Severity and Precision:

Figures 1, 2, 3, and 4 (attached) show the current industry EWMA severity, EWMA precision, and cusum charts for Crosshead Weight Loss (CWL), Filter Plugging Delta P (FPD), Average Sludge Rating (ASR), and Injector Adjusting Screw Weight Loss (IAS). CWL, FPD, and ASR are all currently within control chart limits. IAS is in an industry severity action alarm in the mild direction, however, low-test activity makes it difficult to offer any meaningful commentary regarding this trend.

Precision estimates will be presented on an annual basis, in the table below. The precision estimate for 2005 has only two degrees of freedom which makes it difficult to compare to the 2004 precision estimates.

ISM Precision Estimates

Parameter	2004	2005	2006	2007	2008
df	6	2			
CWL	1.4	0.5			
FPD (ln units)	0.4227	0.2561			
ASR	0.13	0.15			
IAS	7.0	5.0			

Reference Oils:

The current reference oil test targets are shown below:

Oils	N	Parameter	Mean (cSt)	S
830-2	10	CWL	5.3	1.4
		FPD	2.3363	0.4130
		ASR	8.99	0.15
		IAS	24.5	10.7

The TMC will update the surveillance panel when 15 tests have been run on oil 830-2.

Information Letters:

No ISM Information Letters were issued this ASTM period.

TMC Laboratory Visits:

No TMC laboratory visits were conducted this ASTM period.

Additional Information:

The ISM 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/mem06-014.jac.doc

Attachments

c: J.L. Zalar, TMC

F.M. Farber, TMC

Cummins Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/diesel/cummins/semiannualreports/ISM-04-2006.pdf>

Distribution: Email

FIGURE 1
ISM INDUSTRY OPERATIONALLY VALID DATA
FINA ORIG UNIT CROSSHEAD MASS LOSS ADJUSTED TO 3.9

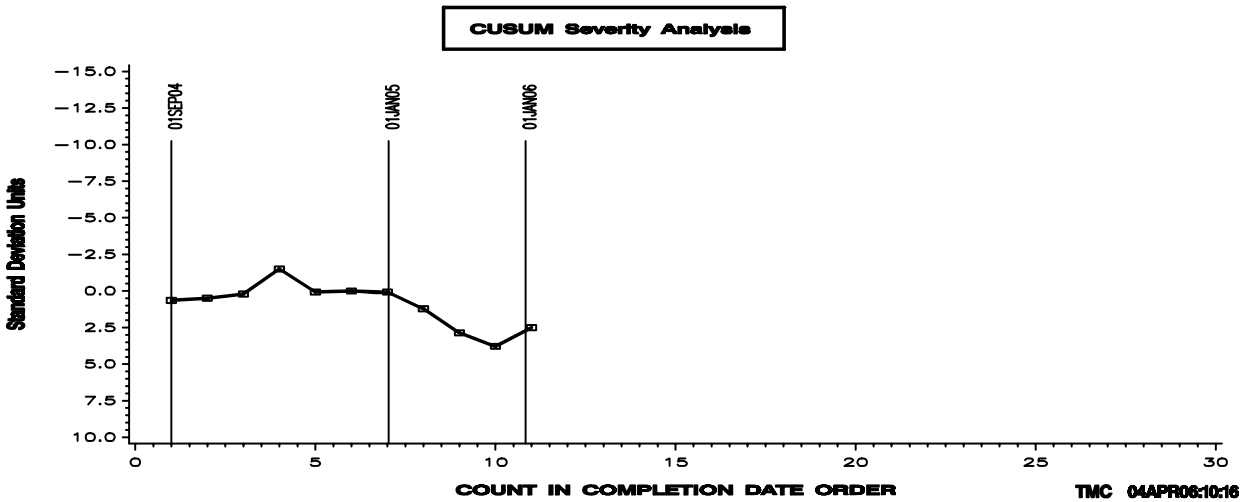
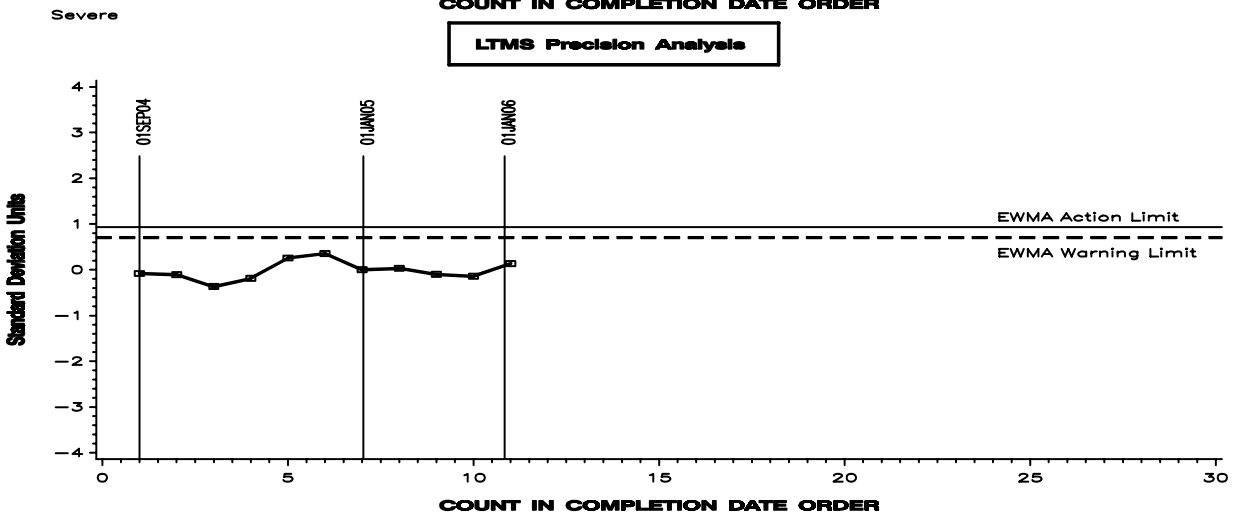
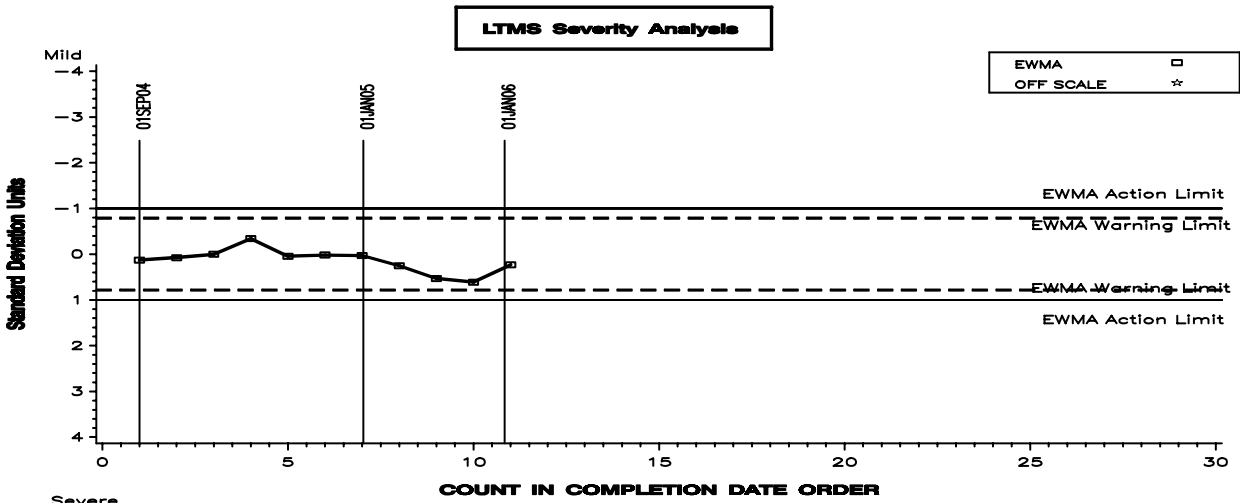


FIGURE 2 ISM INDUSTRY OPERATIONALLY VALID DATA

FILTER PLUGGING DELTA P

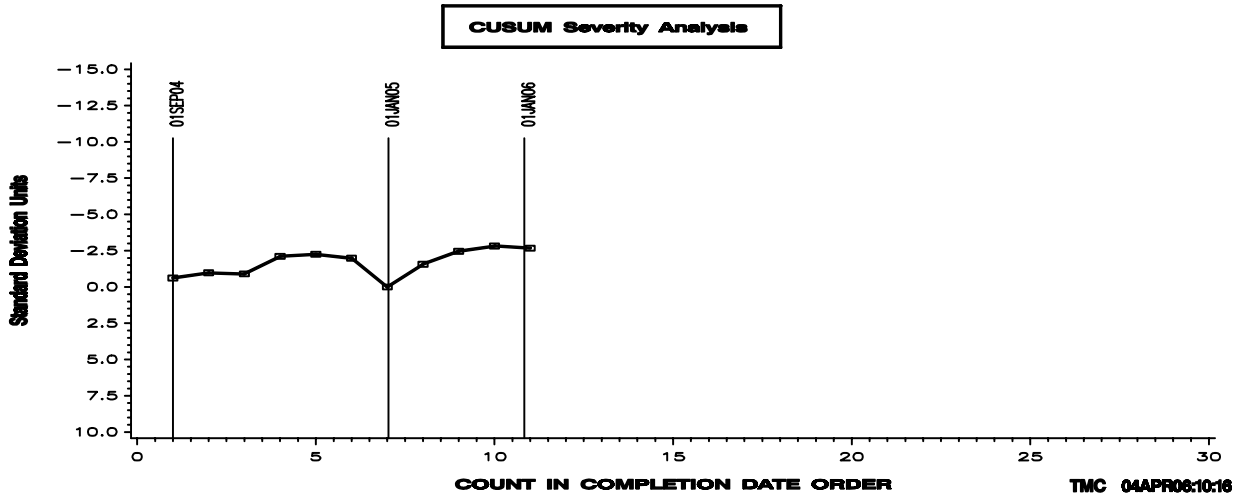
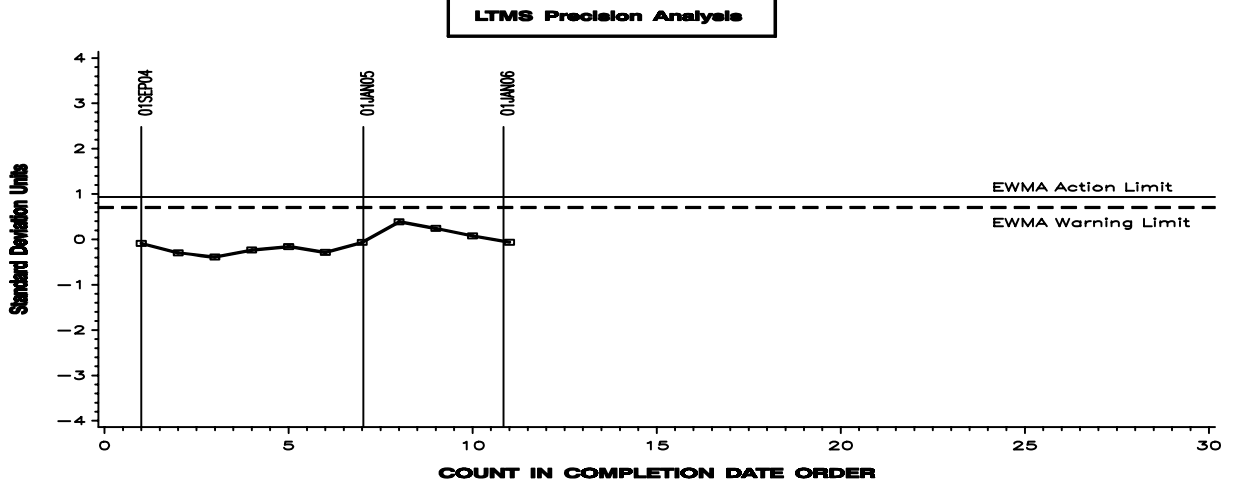
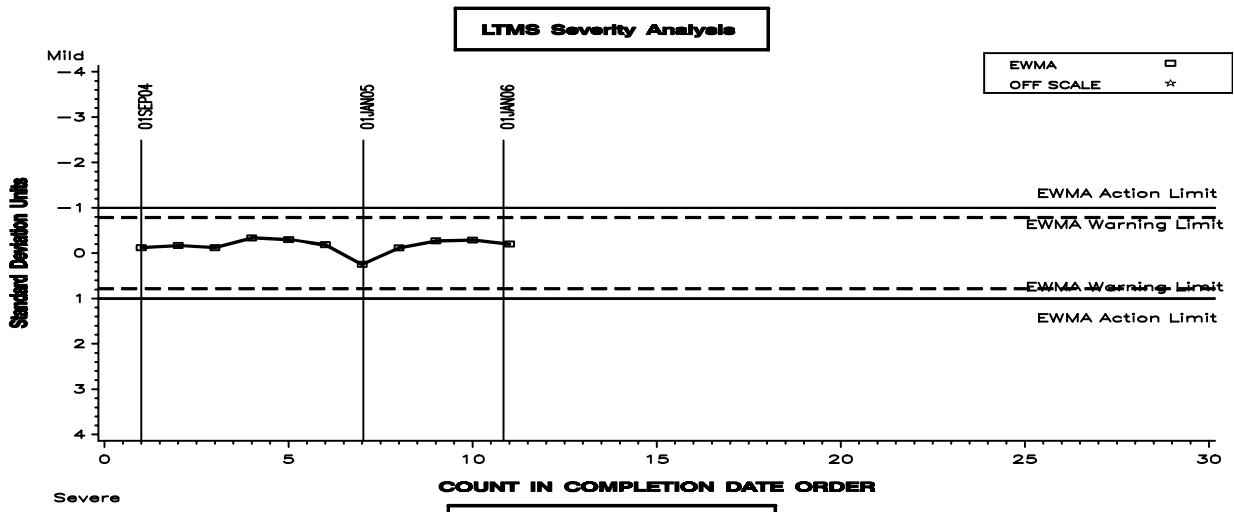


FIGURE 3 ISM INDUSTRY OPERATIONALLY VALID DATA

AVERAGE SLUDGE RATING

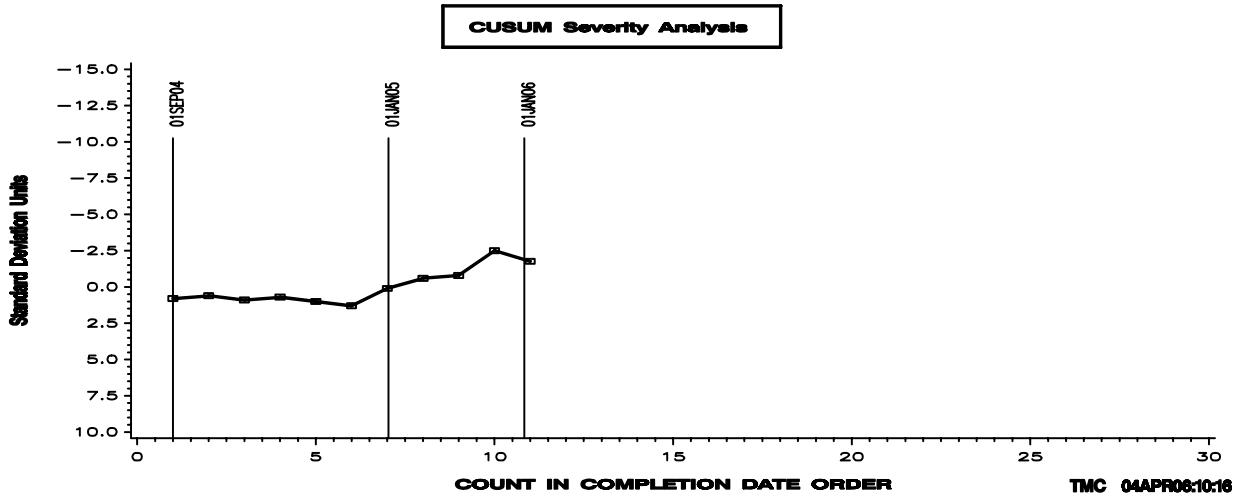
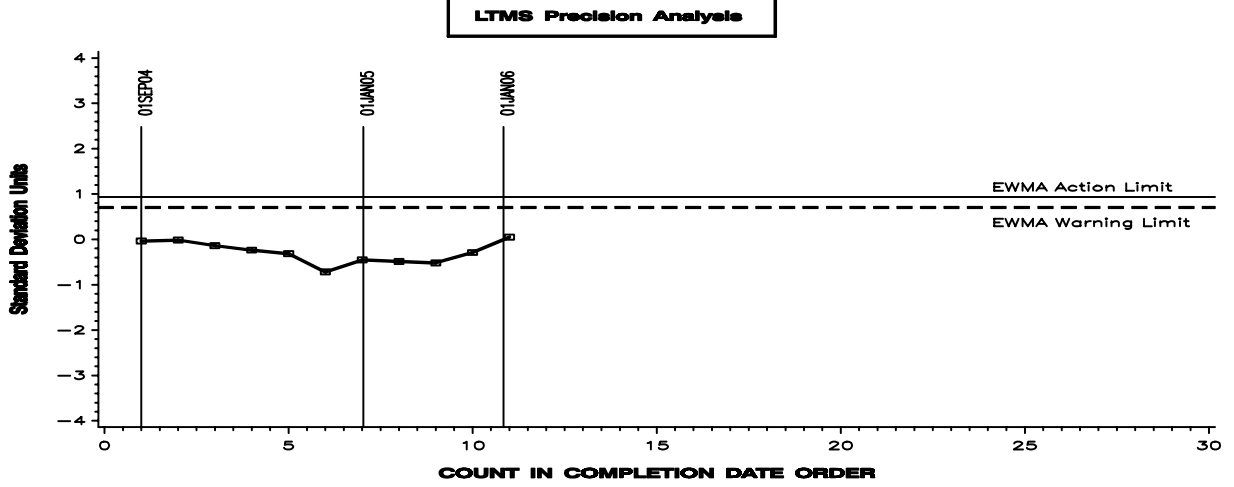
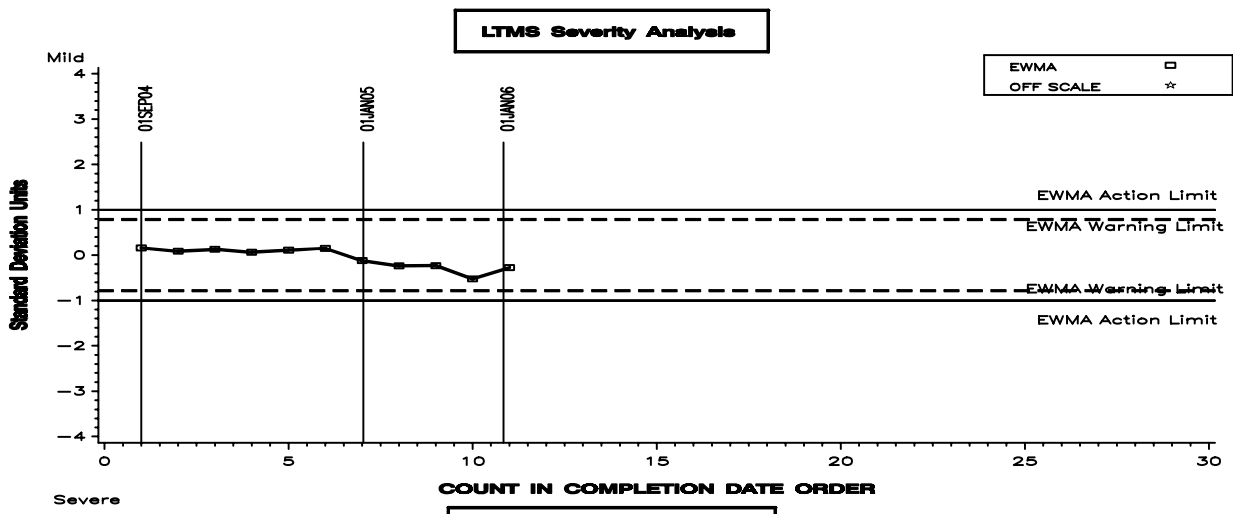


FIGURE 4 ISM INDUSTRY OPERATIONALLY VALID DATA

FINAL ORIG UNIT INJ ADJ. SCREW MASS LOSS ADJ. FOR 3.9% SOOT

