



Test Monitoring Center

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MEMORANDUM: 06-066
DATE: October 2, 2006
TO: Jim Moritz, Chairman, Cummins Surveillance Panel
FROM: Jeff Clark
SUBJECT: ISB Calibration Testing for the October 2006 ASTM Report Period

The following is a summary of ISB reference oil tests completed during the October 2006 ASTM report period, which began on April 1, 2006 and ended on September 30, 2006.

Test Status	TMC Validity Code	Number of Tests
Acceptable Calibration Test	AC	1
Failed Calibration Test (LTMS Criteria)	OC	1
Non-blind, Information	NN	2
Aborted Test	XC	0
Total		4

The test that failed the LTMS criteria (OC) was due to severe tappet weight loss. The non-blind tests (NN) were both part of a base oil interchange program.

Severity and Precision:

Figures 1 and 2 (attached) show the current industry EWMA severity, EWMA precision, and cusum charts for Average Camshaft Wear (ACSW) and Average Tappet Weight Loss (ATWL). ACSW is currently within control chart limits. ATWL is in an industry severity warning action alarm in the severe 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 was primarily generated from the PC-10 matrix program. No estimate is yet available for 2006.

ISM Precision Estimates

Parameter	2005	2006	2007	2008	2009
df	15				
ACSW	6.69				
ATWL	14.13				

Reference Oils:

The current reference oil test targets are shown below:

Oils	N	Parameter	Mean	S
831 (PC10B)	6	ACSW (μm)	41.9	5.6
		ATWL (mg)	88.7	15.9

To date, nine tests have been completed on oil 831. The TMC will notify the surveillance panel when ten tests have been completed.

Information Letters:

No ISB Information Letters were issued this ASTM period.

TMC Laboratory Visits:

No TMC laboratory visits were conducted this ASTM period.

Additional Information:

The ISB 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/mem06-066.jac.doc

Attachments

c: J.L. Zalar, TMC

F.M. Farber, TMC

Cummins Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/diesel/cummins/semiannualreports/ISB-10-2006.pdf>

Distribution: Email

FIGURE 1 CUMMINS ISB INDUSTRY OPERATIONALLY VALID DATA

AVERAGE CAMSHAFT WEAR

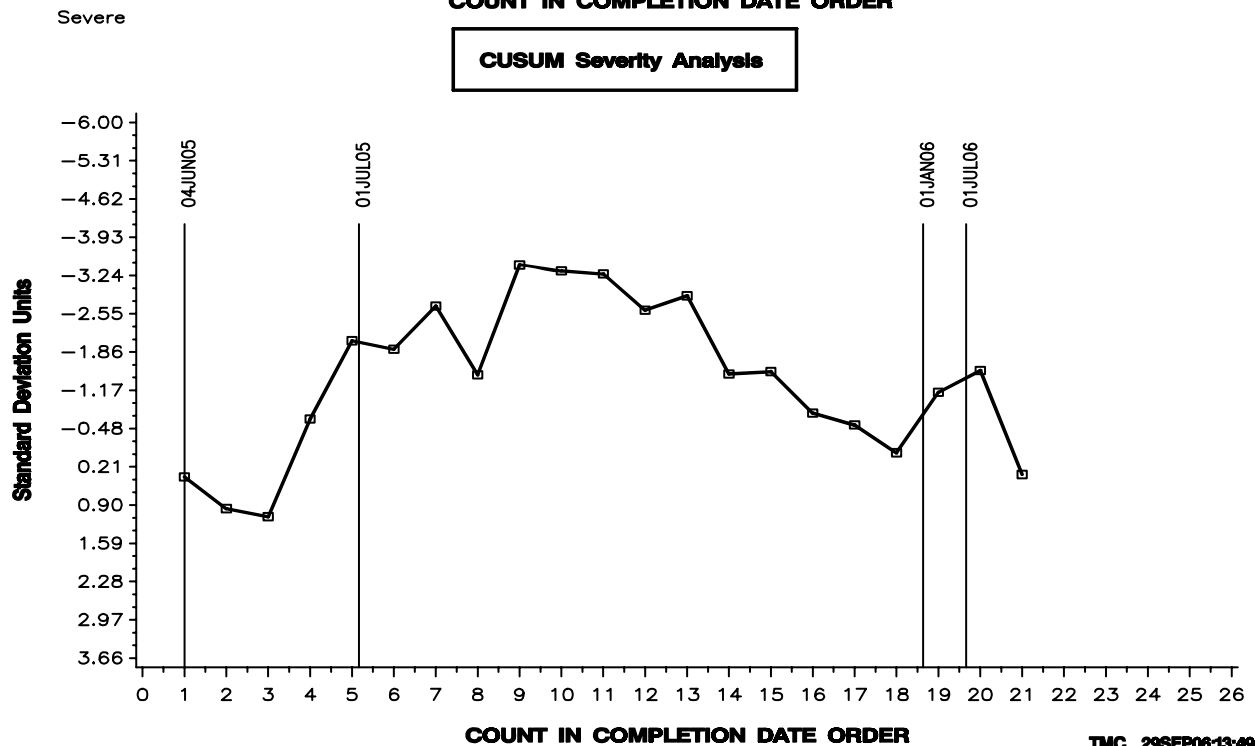
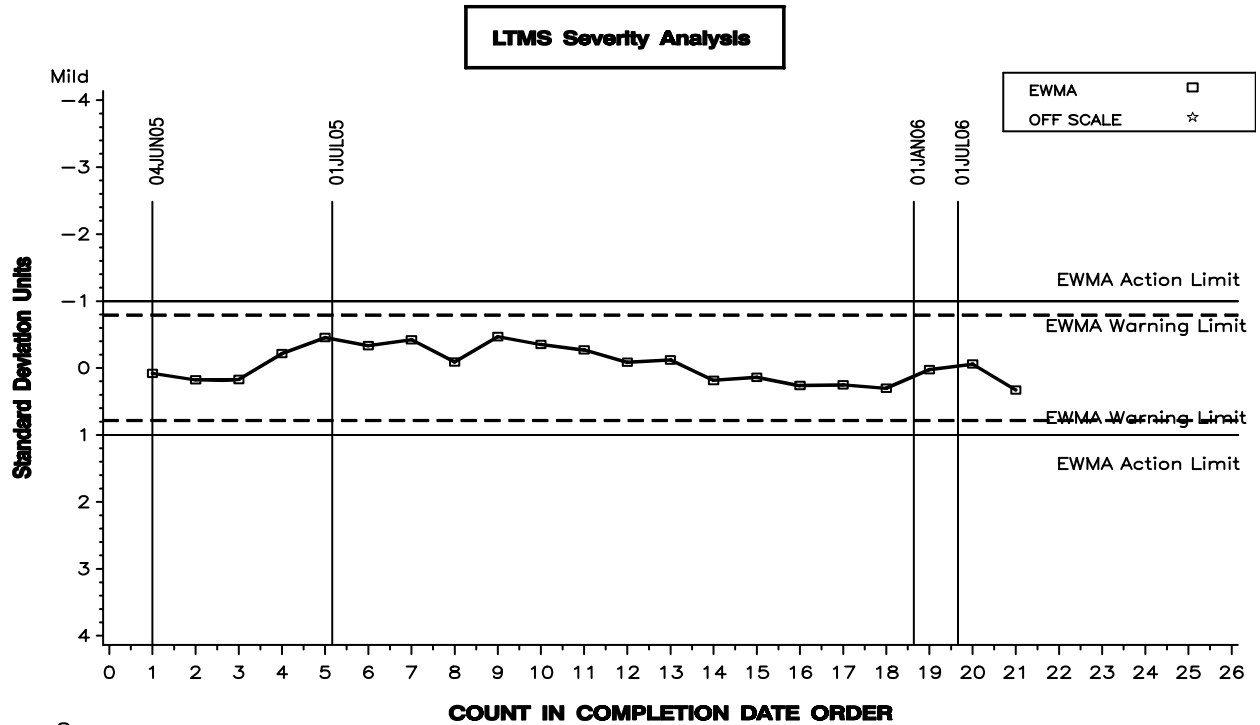


FIGURE 2

CUMMINS ISB INDUSTRY OPERATIONALLY VALID DATA

AVERAGE TAPPET WEIGHT LOSS

