



Test Monitoring Center

6555 Penn Avenue
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(412) 365-1000

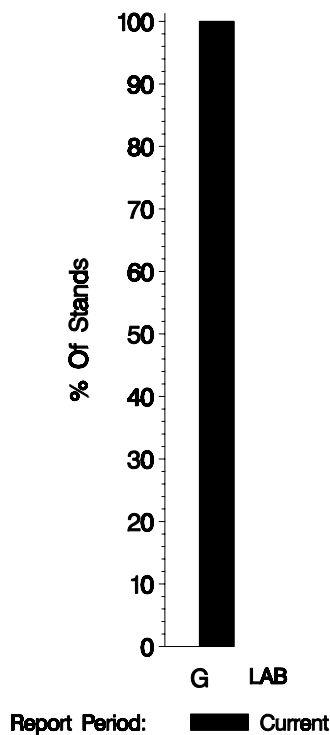
MEMORANDUM: 08-038
DATE: May 27, 2008
TO: James McCord,
Chairman, Single Cylinder Diesel Surveillance Panel
FROM: Scott Parke
SUBJECT: 1R Testing from October 1, 2007 through March 31, 2008

One calibration test was reported to the Test Monitoring Center during the period from October 1, 2007 through March 31, 2008. The data from operationally valid tests is shown on page 7. Following is a summary of testing activity this period.

	Reporting Data	Calibrated on 3-31-08
Number of Labs	1	0
Number of Stands	1	0

Stands reporting data this period were distributed as shown below:

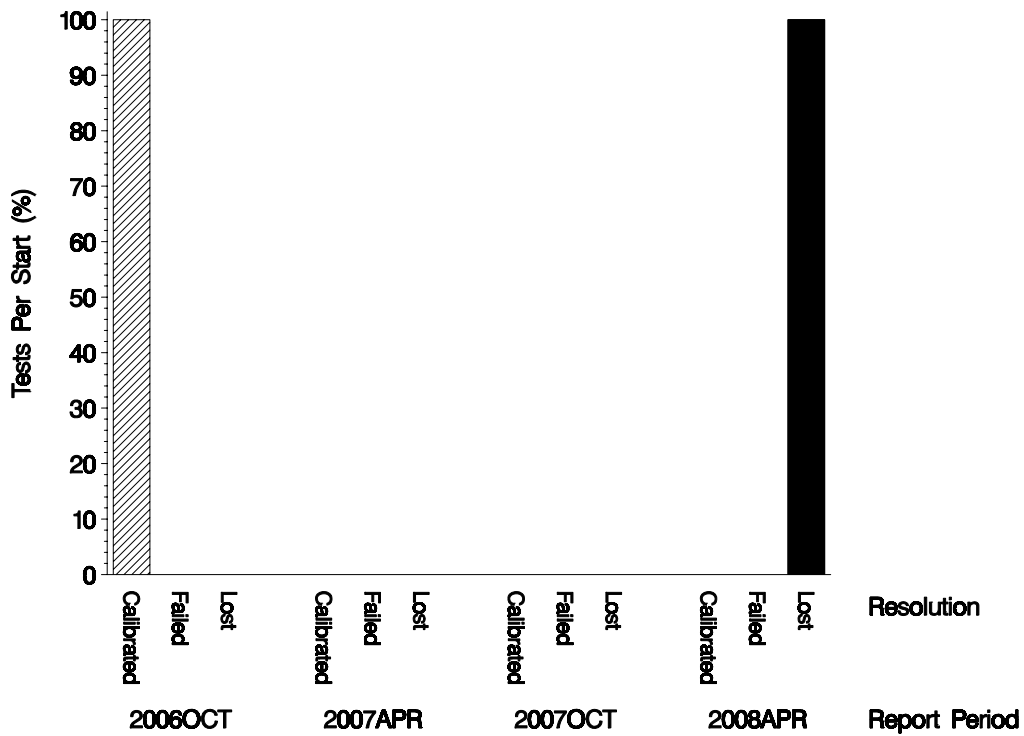
1R LABORATORY / STAND DISTRIBUTION



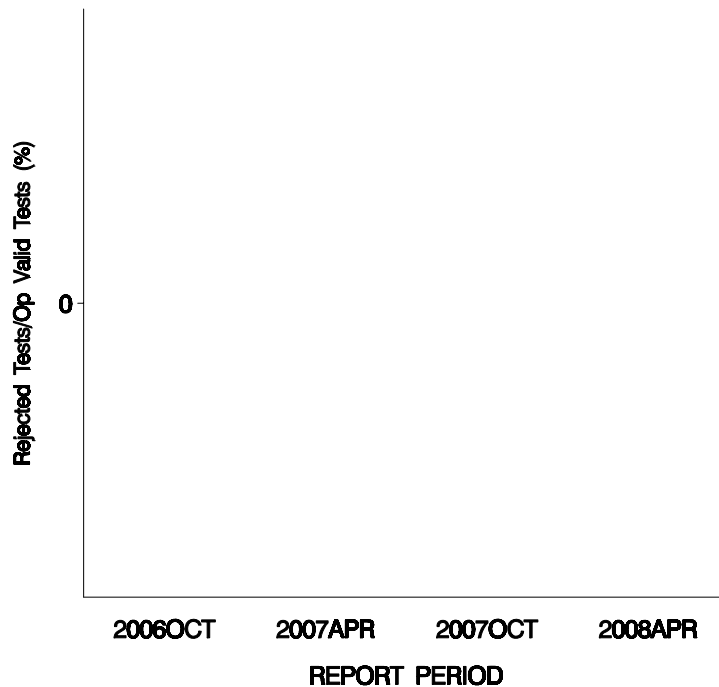
Test Distribution by Oil and Validity

						Totals	
		820-2	1005-1	1005-2	Last Period	This Period	
Accepted for Calibration	AC	0	0	0	0	0	
Rejected Mild	OC	0	0	0	0	0	
Rejected Severe	OC	0	0	0	0	0	
Operationally Invalid (lab)	LC	0	1	0	0	1	
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0	
Aborted Calibration	XC	0	0	0	0	0	
Hardware Information Run	NI	0	0	0	0	0	
Total		0	1	0	0	1	

1R CALIBRATION ATTEMPT SUMMARY



**OPERATIONALLY VALID 1R TESTS
FAILING ACCEPTANCE CRITERIA**



The above chart shows the percentage of failed but operationally valid tests. No tests have failed since September of 2001.

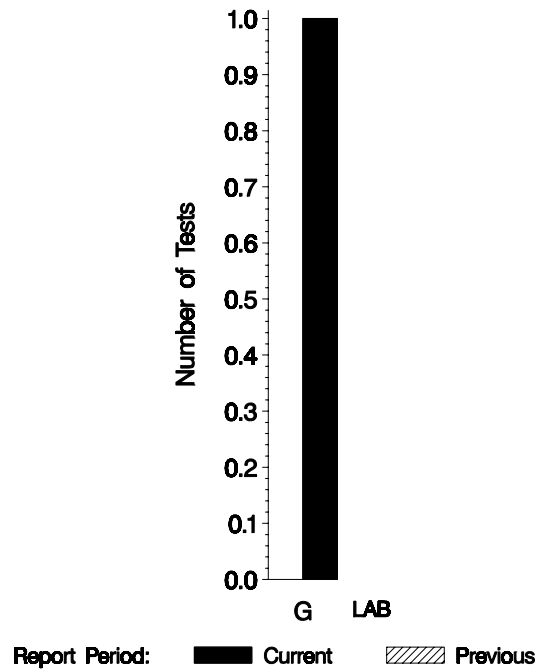
No LTMS deviations were written this period (none have ever been written for this test).

No stands calibrated using reduced-K criteria this period.

By lab, the tests run this report period were distributed as shown below:

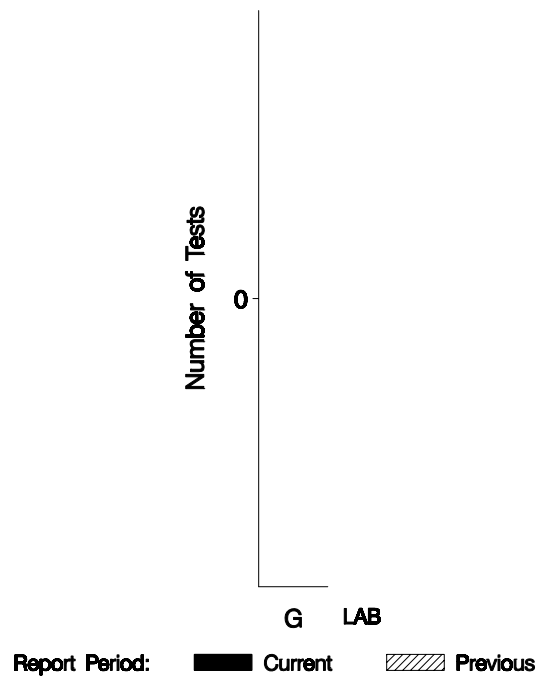
NUMBER OF 1R TESTS REPORTED BY LAB AND REPORT PERIOD

(All Test Starts – Both Valid & Invalid)

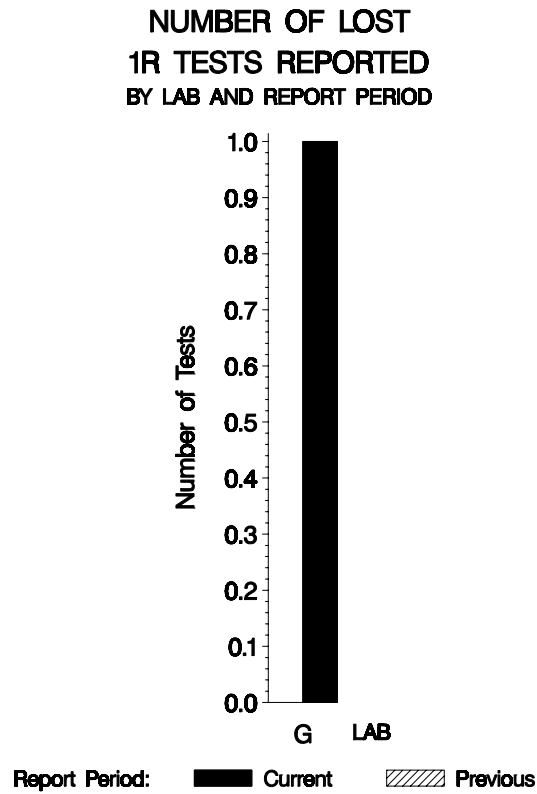


With all operationally invalid tests removed, the distribution looks like this:

NUMBER OF OPERATIONALLY VALID 1R TESTS REPORTED BY LAB AND REPORT PERIOD



And the by-lab distribution of lost tests:



One test was lost this period.

Lost Tests per Start by Oil and Lab

Lab	820-2			1005-1			1005-2			Total		
	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%
G				1	1	100				1	1	100
Total				1	1	100				1	1	100

Lost tests are those that were either aborted, rejected by lab, or operationally invalid.

Causes for Lost Tests

Lab	Cause	Oil			Validity			Loss Rate		
		1004-3	1005-1	1005-2	LC	RC	XC	Lost	Starts	%
G	Humidity and coolant flow QI <0 caused severe results.		●		●			1	1	100%
	Lost	0	1	0	1	0				
	Starts	0	1	0	1	1	1			
	%	0%	100%	0%	100%	0%	0%			

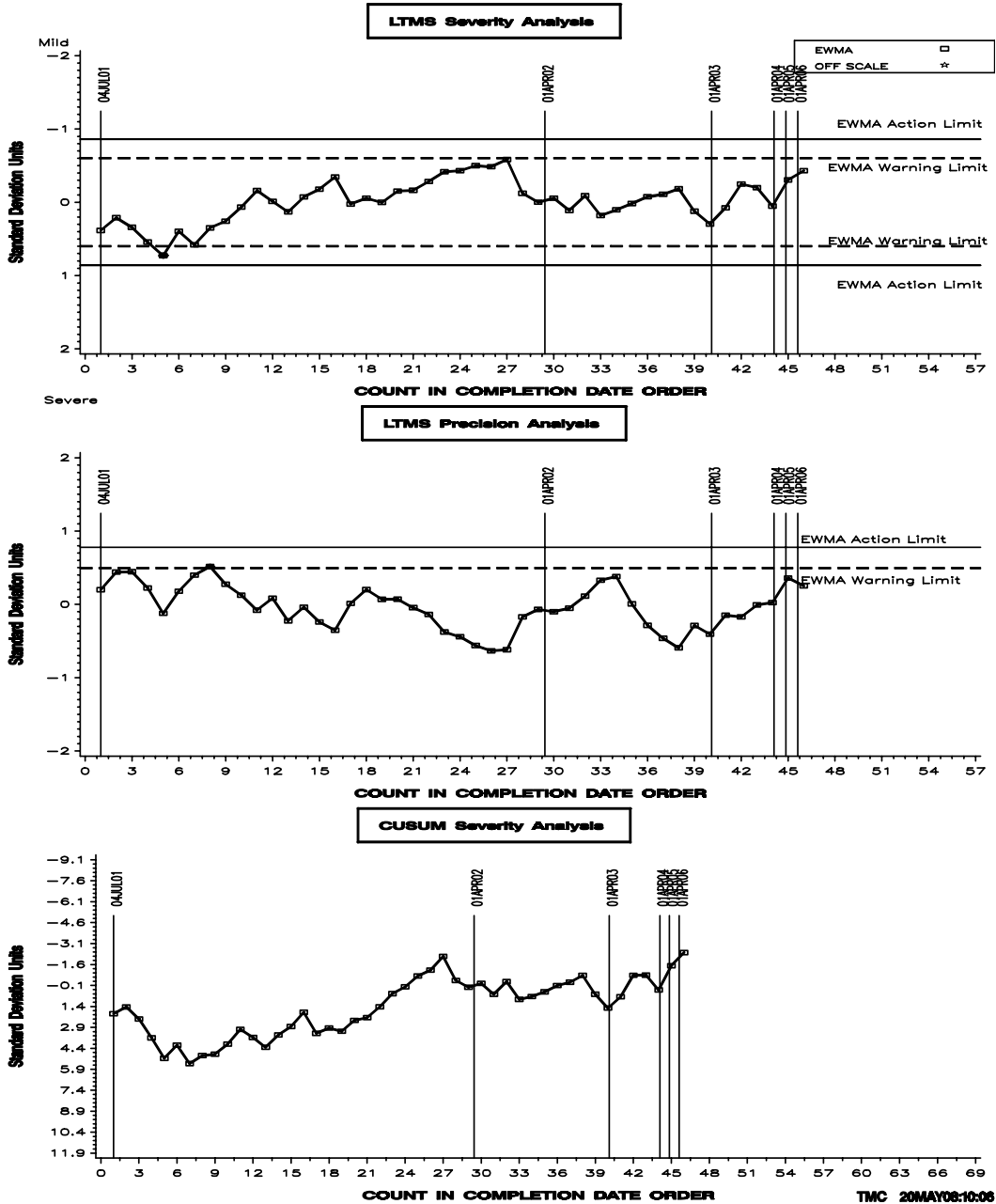
No operationally valid tests were reported this period.

CURRENT INDUSTRY STATUS

TGC:

CATERPILLAR 1R INDUSTRY OPERATIONALLY VALID DATA

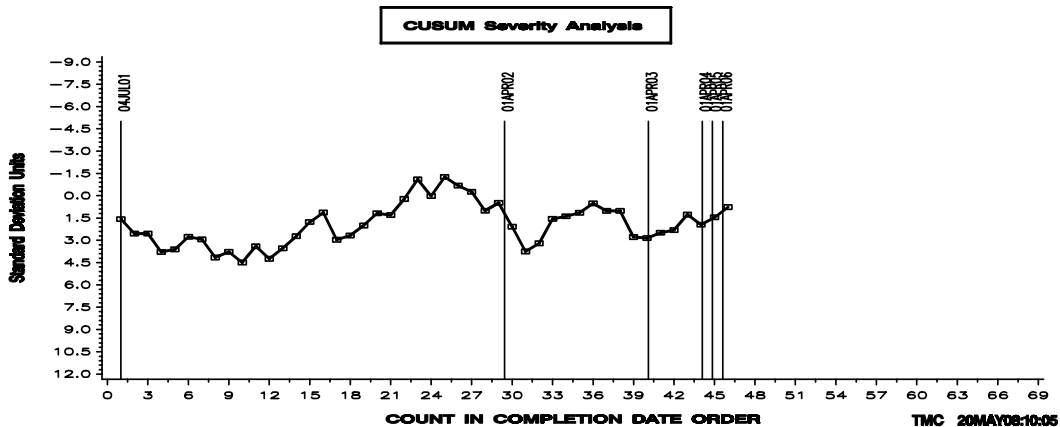
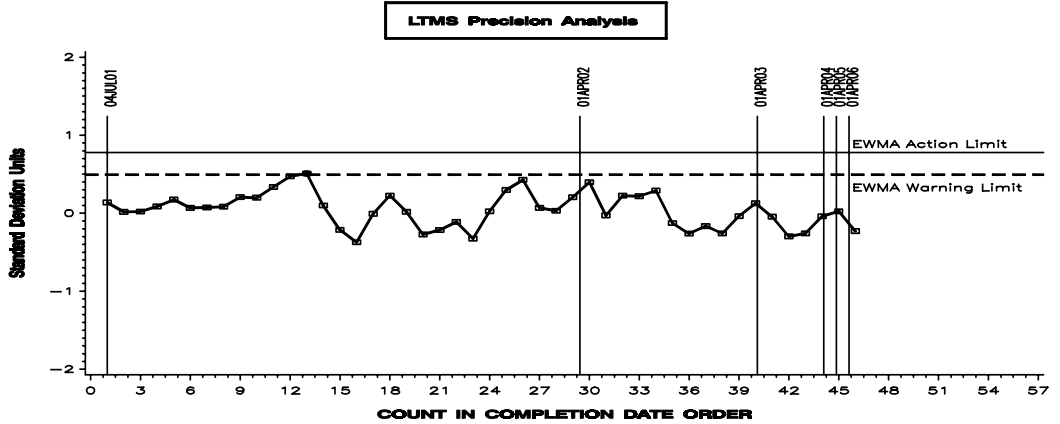
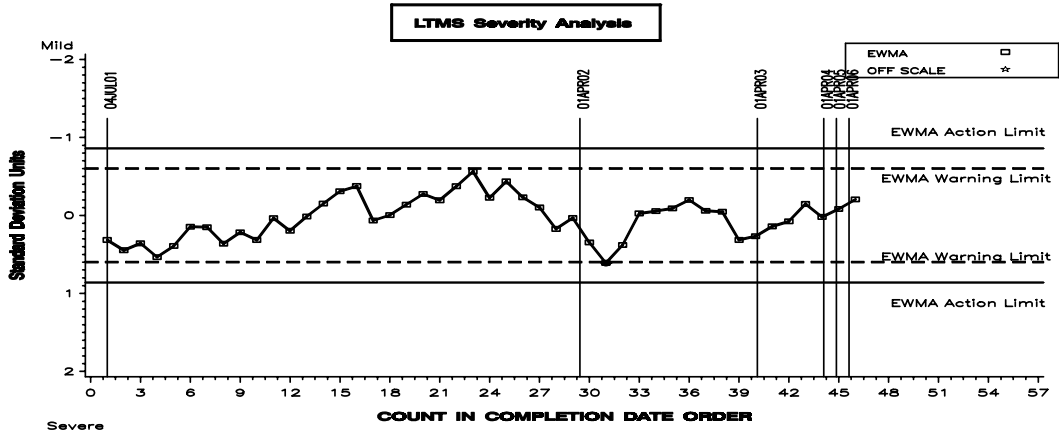
FINAL TOP GROOVE CARBON (DEMERITS)



WDP:

CATERPILLAR 1R INDUSTRY OPERATIONALLY VALID DATA

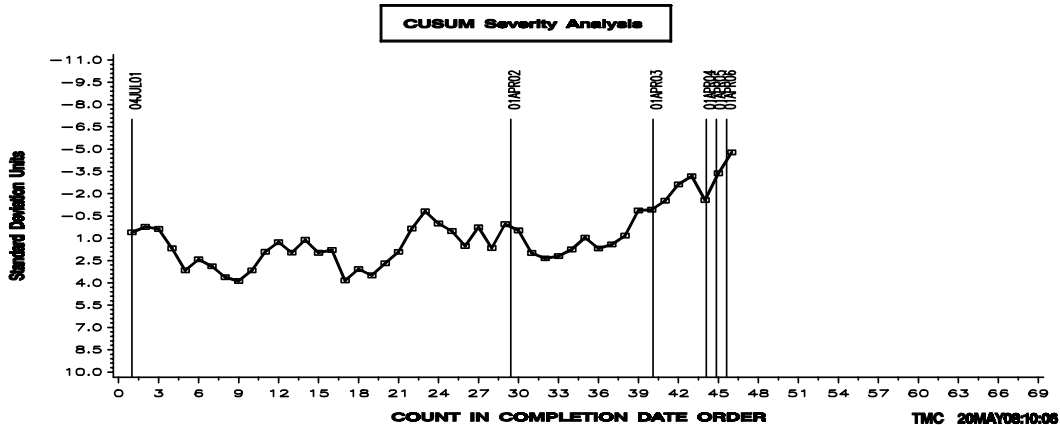
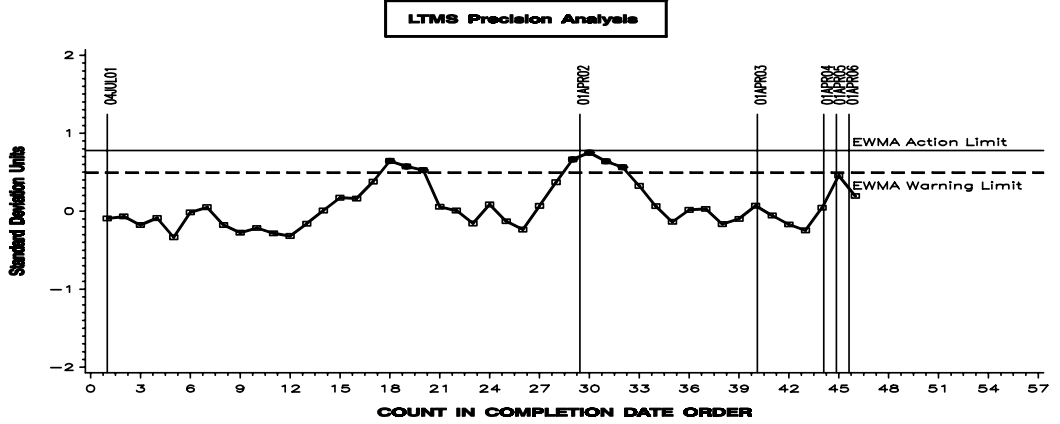
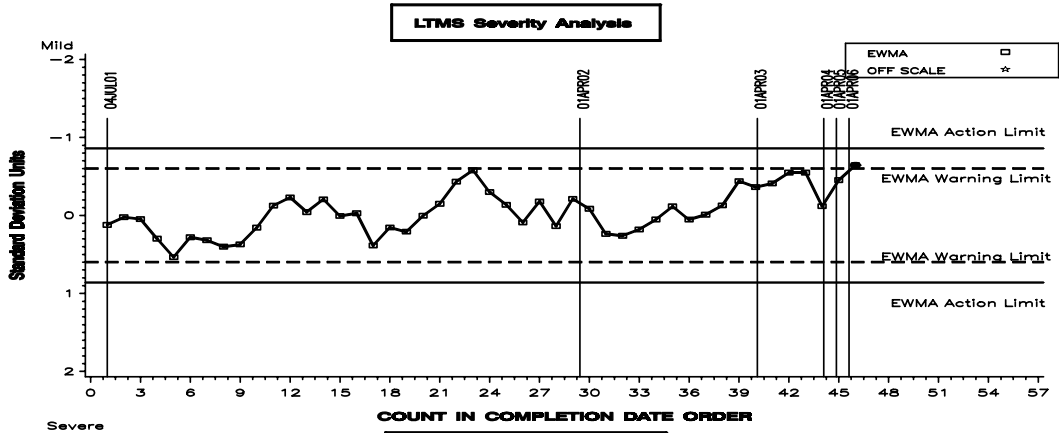
FINAL WEIGHTED TOTAL DEMERITS (DEMERITS)



TLC:

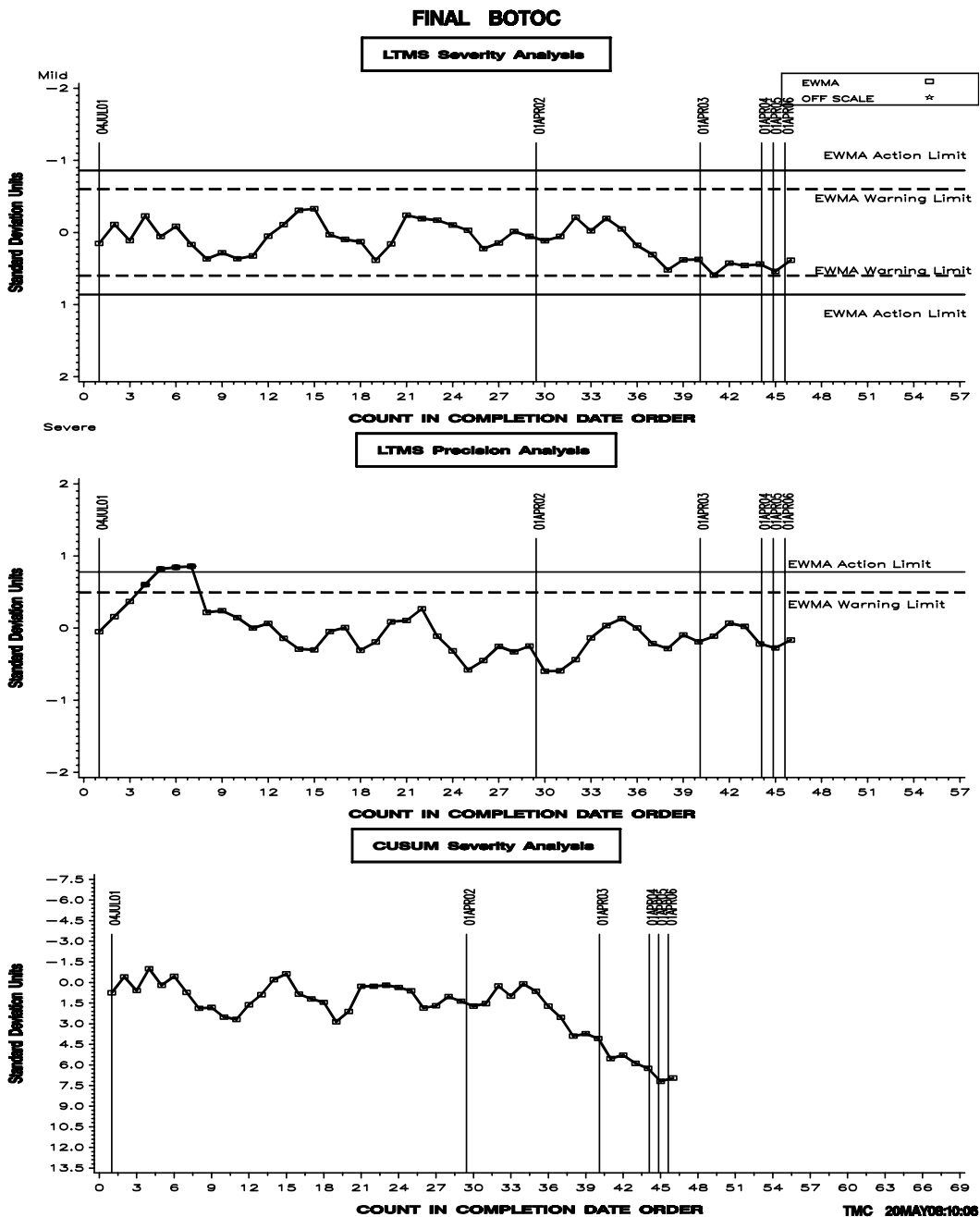
CATERPILLAR 1R INDUSTRY OPERATIONALLY VALID DATA

FINAL TOP LAND CARBON (DEMERITS)



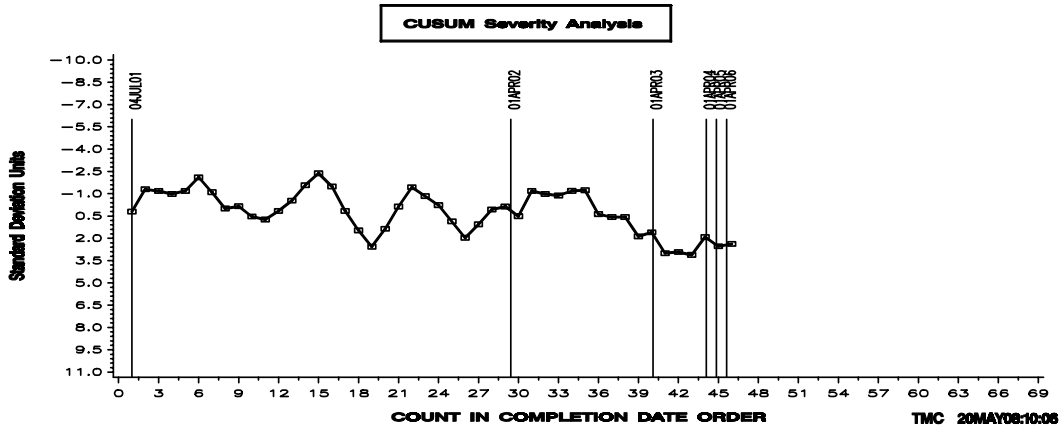
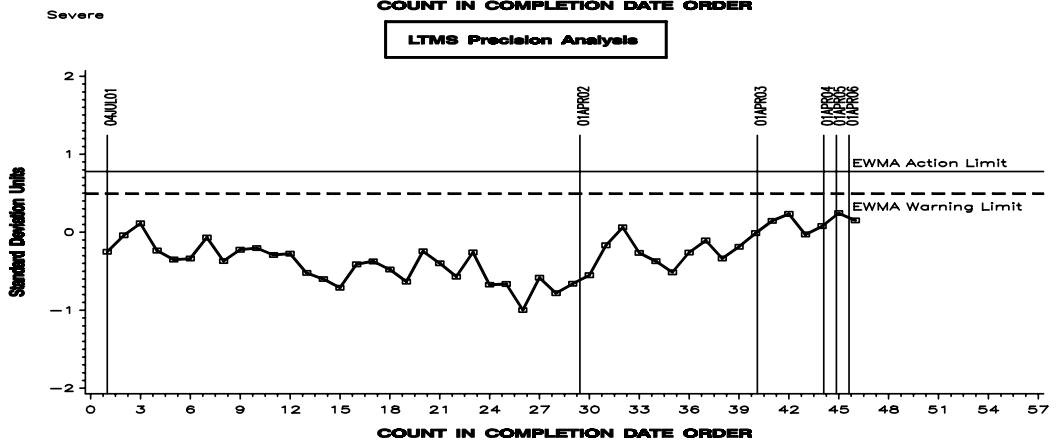
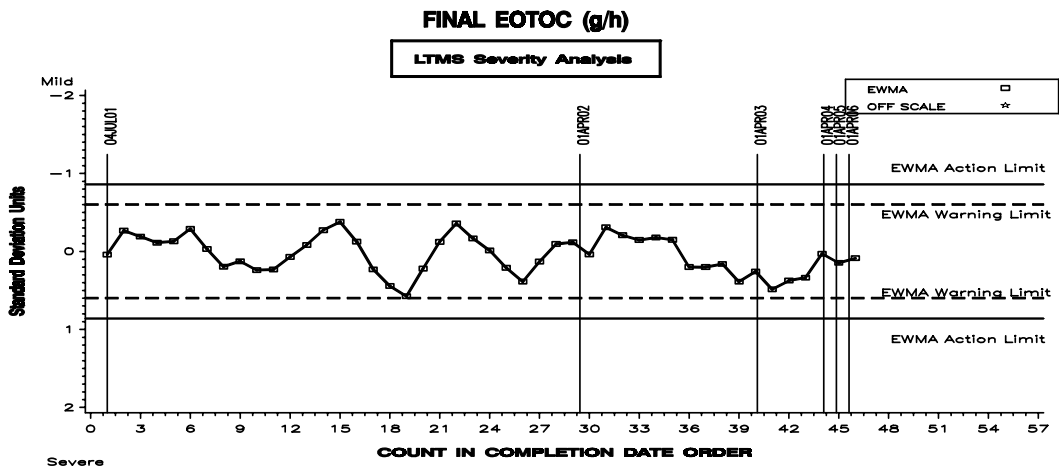
Beginning-of-Test Oil Consumption (BTOC):

CATERPILLAR 1R INDUSTRY OPERATIONALLY VALID DATA



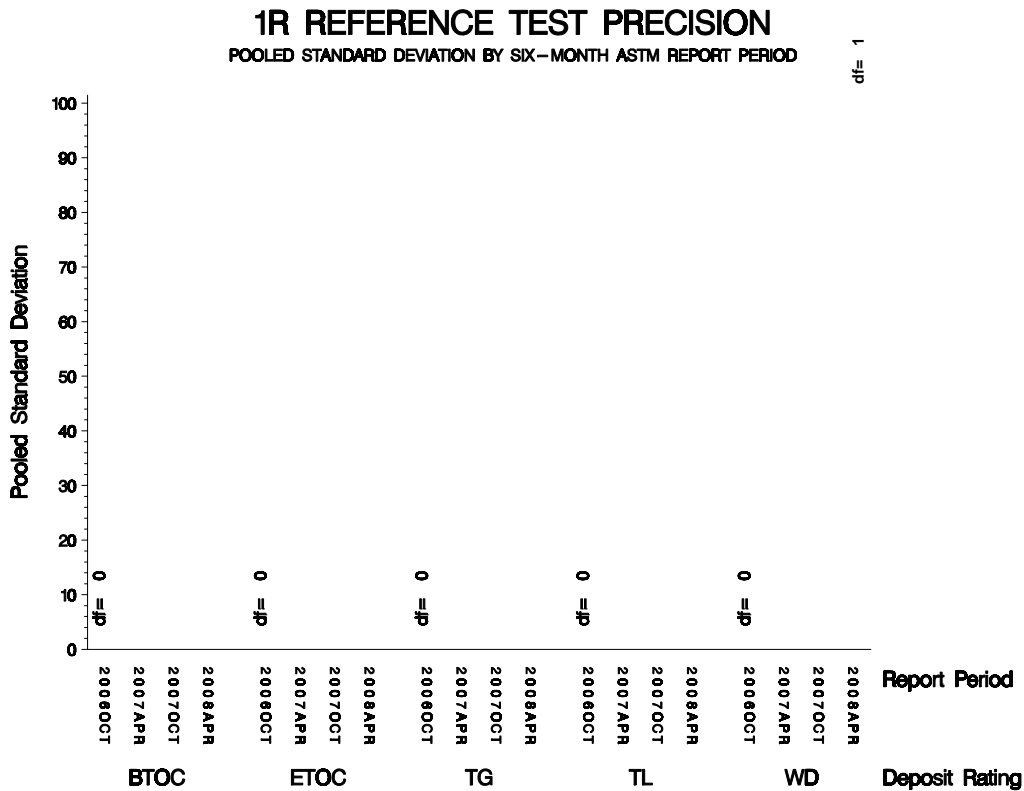
EOT Oil Consumption (ETOC):

CATERPILLAR 1R INDUSTRY OPERATIONALLY VALID DATA



POOLED S:

Shown below is a bar chart comparing the pooled s values for the 1R test parameters over the last four report periods. Please note that the values for oil consumption (OCTI) and end of test oil consumption (ETOCTI) have been multiplied by 10 to allow these parameters to be shown on the same plot as the other parameters. Where degrees of freedom equal zero, no bars are shown. This will occur where only one test was reported or where multiple tests are reported but all are on different oils.



STATUS OF REFERENCE OIL SUPPLY:

At the end of this report period, the testing oil supply stood as outlined in the following table:

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
820-2	6	0	10
1005-1	9	0	5
1005-2	0	34	510
Total	15	34	525

* Future reblends of oils marked with an asterisk are not obtainable by TMC.

Be aware that this table presumes that all of each of these oils is dedicated to the 1R test area. This is not the case; all of these oils are also used in other diesel test areas.

TIMELINE OF SIGNIFICANT EVENTS IN THE LIFE OF THE 1P TEST:

Effective Date	Info Letter	
20010612		START OF FIRST 1R MATRIX TEST
20010902		END OF LAST 1R MATRIX TEST
20011001		BEGIN REGISTERED TESTING
20030101	03-1	FIRST ISSUE OF PROCEDURE DRAFT
20030101	03-1	QUALITY INDEX CALCULATION CONSTANTS FINALIZED
20040212		DD VERSION 20040116 ACC STATEMENT ADDED TO REPORT FORMS
20050321	05-1	SOLVENT SPEC, CAL PERIOD ADJUSTMENT GUIDELINES, PRECISION STMT WORDING

RATING:

No 1R re-rates were required during this report period. The table below summarizes the re-rates for this report period:

Rating Re-rate Summary	
Number of tests where lab rating was changed	0
Number of tests where referee rating was changed	0
Number of tests where no changes were made	0
Total number of re-rates requested	<u>0</u>

LAB VISITS:

No 1R lab visits were completed during this report period.

INFORMATION LETTERS:

No information letters were issued during this report period

SUMMARY

- Over the course of this report period, all parameters remained within acceptable severity limits.
- Precision for all parameters remained within acceptable limits.

SDP/sdp/astm0408.doc/mem08-038.sdp.doc

c: J. L. Zalar
F. M. Farber
Hind Abi-Akar, Caterpillar
Jade Katinas, Caterpillar
Single Cylinder Diesel Surveillance Panel
<ftp://ftp.astmtmc.cmu.edu/docs/diesel/scote/semiannualreports/1r-04-2008.pdf>

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