

Test Monitoring Center

@ Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

MEMORANDUM: 21-004

DATE: April 20, 2021

TO: Rebecca Warden, Chairman, High Temperature Cyclic Durability Test

Dy Bego

Surveillance Panel

FROM: Dylan Beck

SUBJECT: HTCT Testing from October 1, 2020 through March 31, 2021

Attached is a summary of testing activity this period.

DJB/djb/mem21-004.djb.doc

cc: Frank Farber Jeff Clark

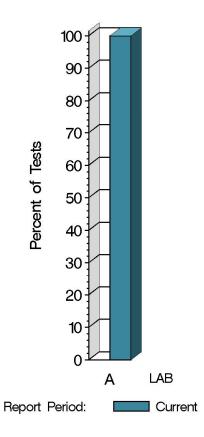
HTCT Surveillance Panel

http://www.astmtmc.cmu.edu/ftp/docs/gear/htct/semiannualreports/htct-04-2021.pdf

Distribution: email

	Reporting Data	Calibrated on 3-31-21
Number of Labs	1	1
Number of Stands	1	1

BY-LAB TEST DISTRIBUTION





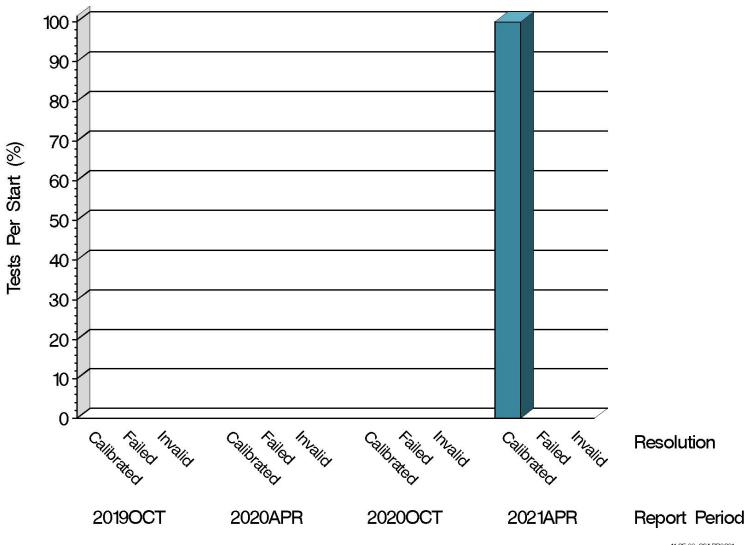


Test Distribution by Oil and Validity

					Totals		
		154	155	155-1	Last Period	This Period	
Accepted for calibration	AC	0	0	1	0	1	
Rejected (Mild)	OC	0	0	0	0	0	
Rejected (Severe)	OC	0	0	0	0	0	
Rejected (Precision)	OC	0	0	0	0	0	
Invalidated calibration	LC	0	0	0	0	0	
Aborted	XC	0	0	0	0	0	
Accepted information run	NI	0	0	0	0	0	
Total		0	0	1	0	1	



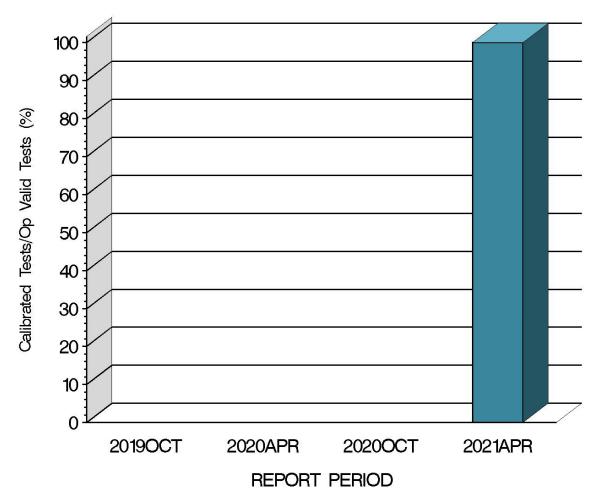
CALIBRATION ATTEMPT SUMMARY







OPERATIONALLY VALID TESTS MEETING ACCEPTANCE CRITERIA



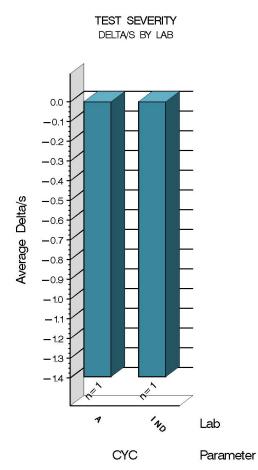




High Temperature Cyclic Transmission CAUSES FOR LOST TESTS

			Oil			Validity			Loss Rate		
Lab	Cause		154	155	155-1	RC	LC	XC	Lost	Starts	%
	No tests were period.	lost this							0	1	0%
		Lost	0	0	0	0	0	0			
		Starts	0	0	1	1	1	1			
		%	0%	0%	0%	0%	0%	0%			

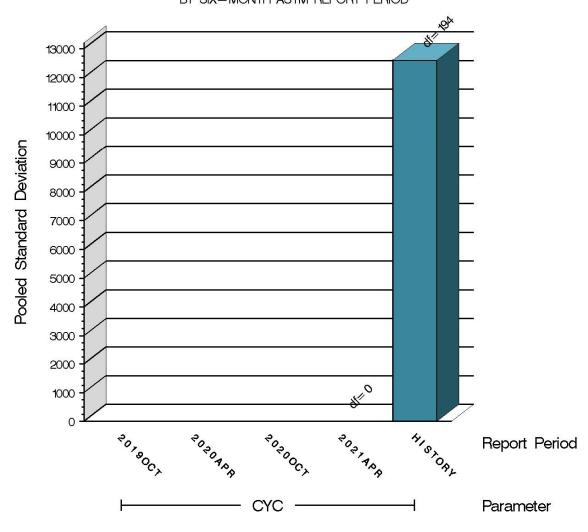




Average ∆/s by Lab				
Lab	n	CYC		
Α	1	-1.39		
Industry	1	-1.39		
Shift	1	-13463.9		



TEST PRECISION POOLED STANDARD DEVIATION BY SIX-MONTH ASTM REPORT PERIOD







High Temperature Cyclic Transmission SUMMARY OF SEVERITY & PRECISION

Severity

The CYC result reported this period was outside of the EWMA action limit in the severe direction. The test still received calibration due to the Shewhart severity limit not being exceeded.

Precision

The CYC result reported this period did not result in any precision alarms.

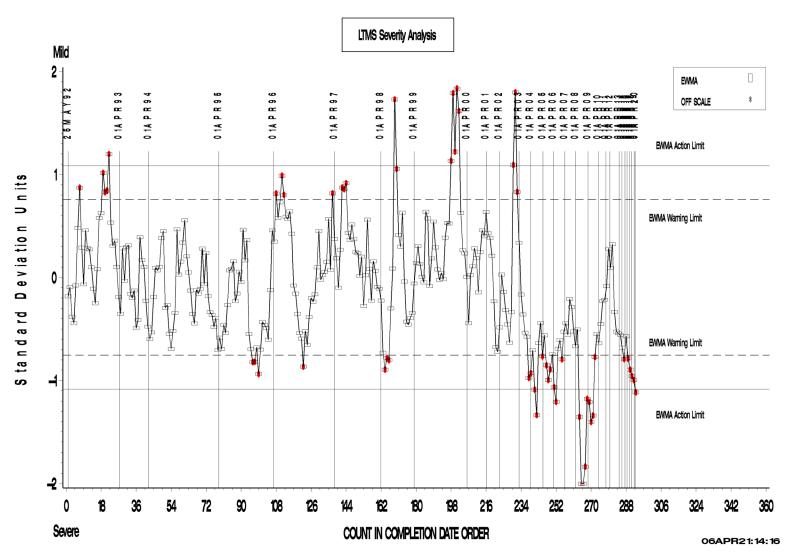
Industry control charts follow.





HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES

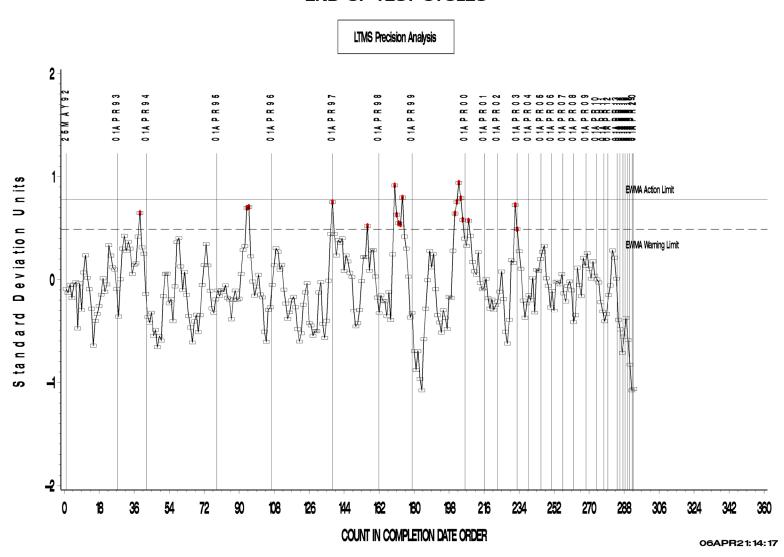






HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES

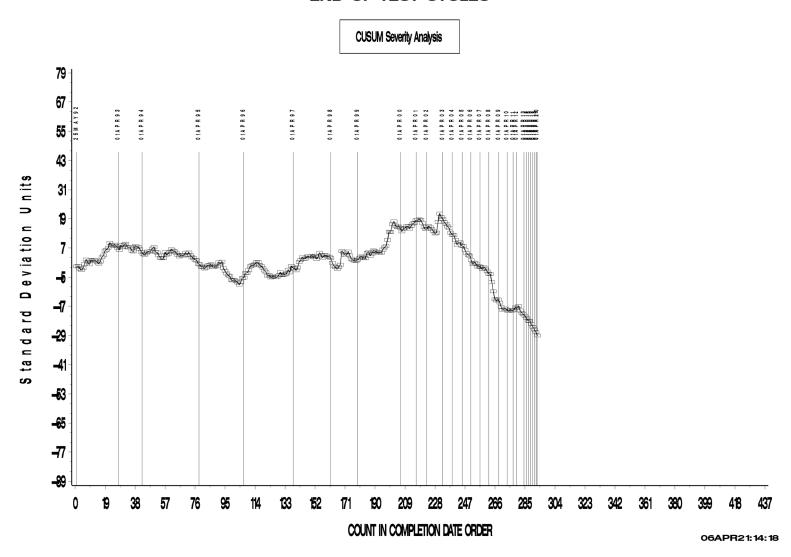






HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES







TIMELINE ADDITIONS

Effective Date	Information Letter	Event	
		No information letters were issued during this reporting period.	



LAB VISITS

No lab visits were conducted during this period.

INFORMATION LETTERS

No information letters issued during this reporting period.





STATUS OF REFERENCE OIL SUPPLY

		@ TMC		
Oil	Cans @ Labs	Cans	Gallons	
154	2	16	176.0	
155	0	1	15.0	
155-1	3	3	36.8	
Total	5	20	227.8	

The TMC quantity remaining presumes usage only for HTCT testing. Oil 155/155-1 is also used in other test areas (L-33-1, L-37, L-60-1 and L-37-1). Oil 154 is the discrimination oil used only for new hardware approval.



