



## Test Monitoring Center


@ Carnegie Mellon University  
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<http://astmtmc.cmu.edu>  
412-365-1000

MEMORANDUM: 14-022

DATE: October 8, 2014

TO: Brian Koehler, Chairman, High Temperature Cyclic Durability Test  
Surveillance Panel

FROM: Scott Parke 

SUBJECT: HTCT Testing from April 1, 2014 through September 30, 2014

Please find attached a summary of testing activity this period.

SDP/sdp/mem14-022.sdp.doc

cc: Frank Farber  
Jeff Clark

HTCT Surveillance Panel

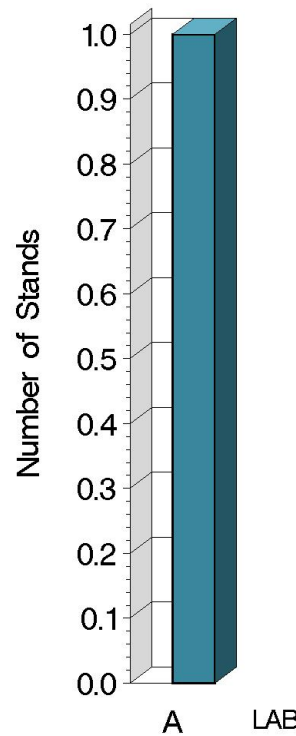
<ftp://ftp.astmtmc.cmu.edu/docs/gear/htct/semiannualreports/htct-10-2014.pdf>

Distribution: email

# High Temperature Cyclic Transmission

	Reporting Data	Calibrated on 9-30-14
Number of Labs	1	1
Number of Stands	1	1

BY-LAB STAND  
DISTRIBUTION



Report Period:  Current

9:39:58 08OCT2014

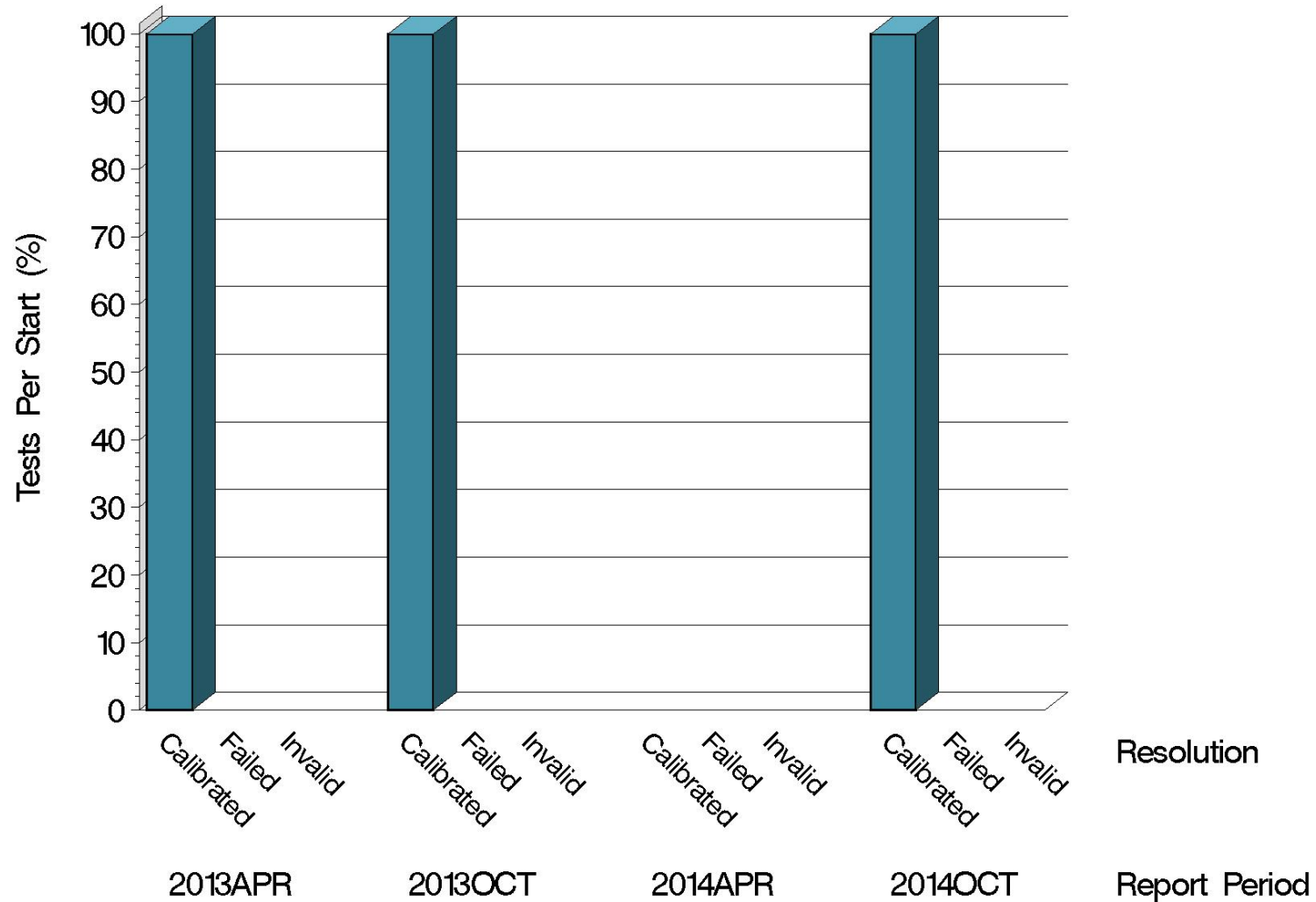
# High Temperature Cyclic Transmission

## Test Distribution by Oil and Validity

					Totals	
		150-2	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
<b>Total</b>		<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

# High Temperature Cyclic Transmission

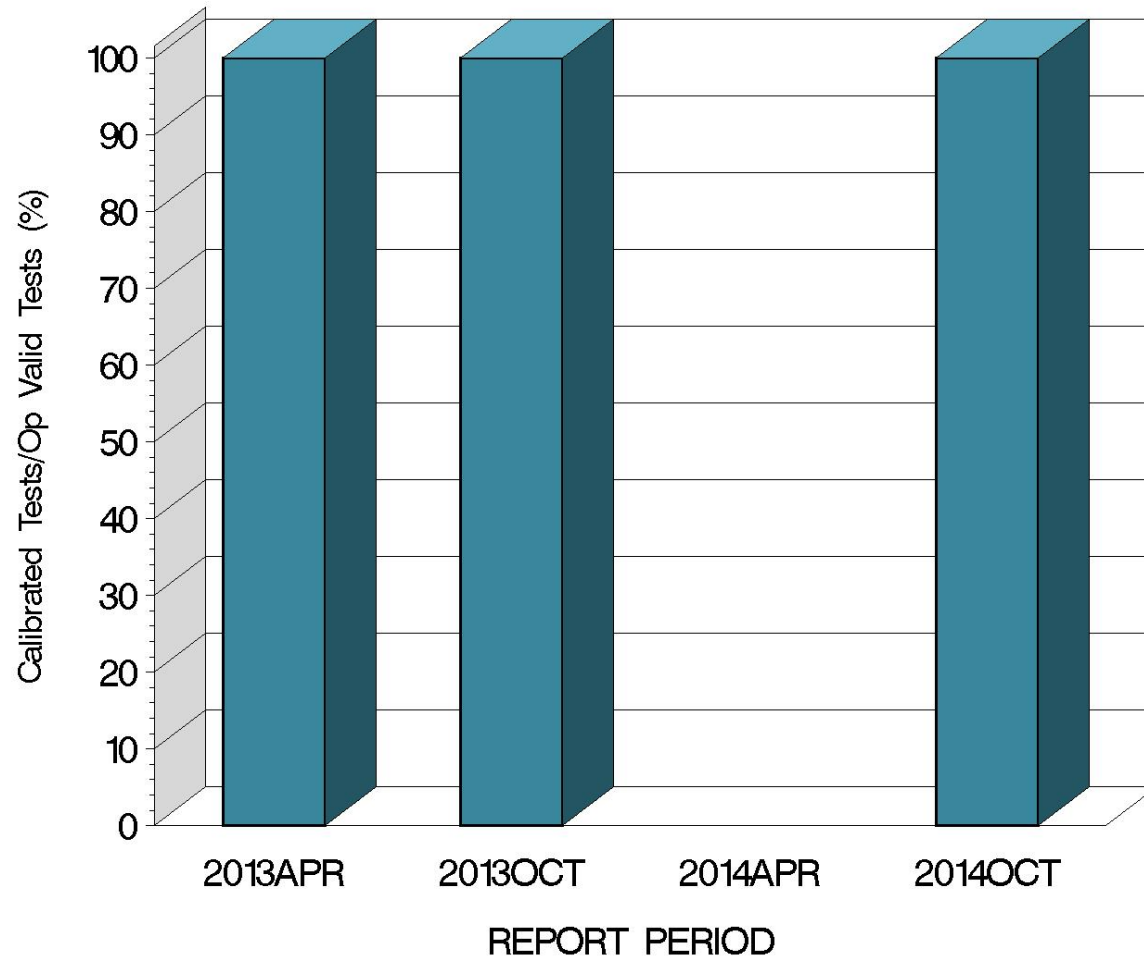
## CALIBRATION ATTEMPT SUMMARY



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# High Temperature Cyclic Transmission

OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



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# High Temperature Cyclic Transmission

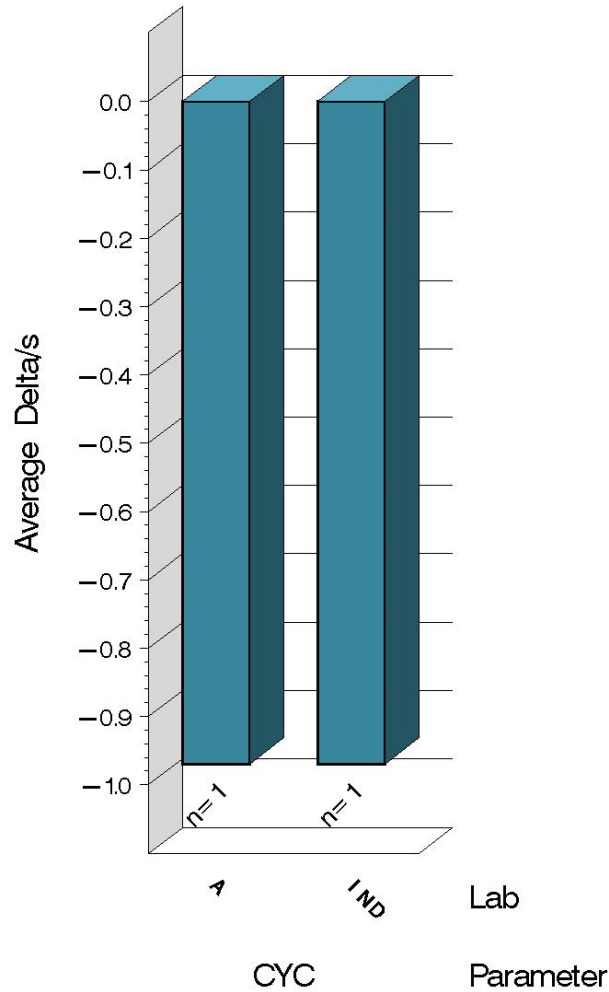
## CAUSES FOR LOST TESTS

		Oil			Validity			Loss Rate		
Lab	Cause	150-2	155	155-1	RC	LC	XC	Lost	Starts	%
	No tests were lost this period.							0	1	0%
	Lost	0	0	0	0	0	0			
	Starts	0	0	1	1	1	1			
	%	0%	0%	0%	0%	0%	0%			

# High Temperature Cyclic Transmission

## TEST SEVERITY

DELTA/S BY LAB

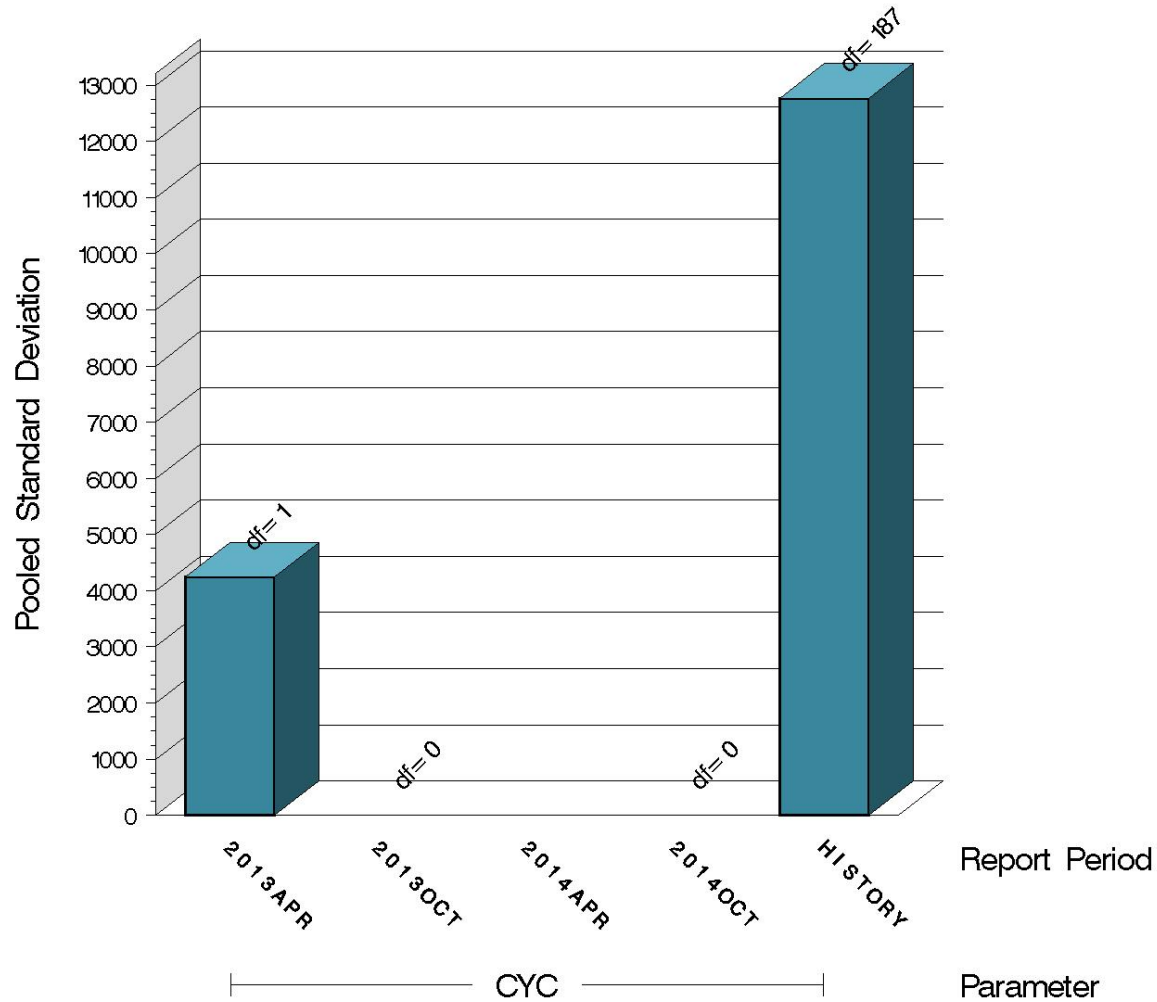


Average $\Delta/s$ by Lab		
Lab	n	CYC
A	1	-0.97
Industry	1	-0.97
Shift	1	-9367

# High Temperature Cyclic Transmission

## TEST PRECISION

POOLED STANDARD DEVIATION  
BY SIX-MONTH ASTM REPORT PERIOD



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# High Temperature Cyclic Transmission

## SUMMARY OF SEVERITY & PRECISION

### Severity

The CYC result reported this period was within severity control chart limits.

### Precision

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

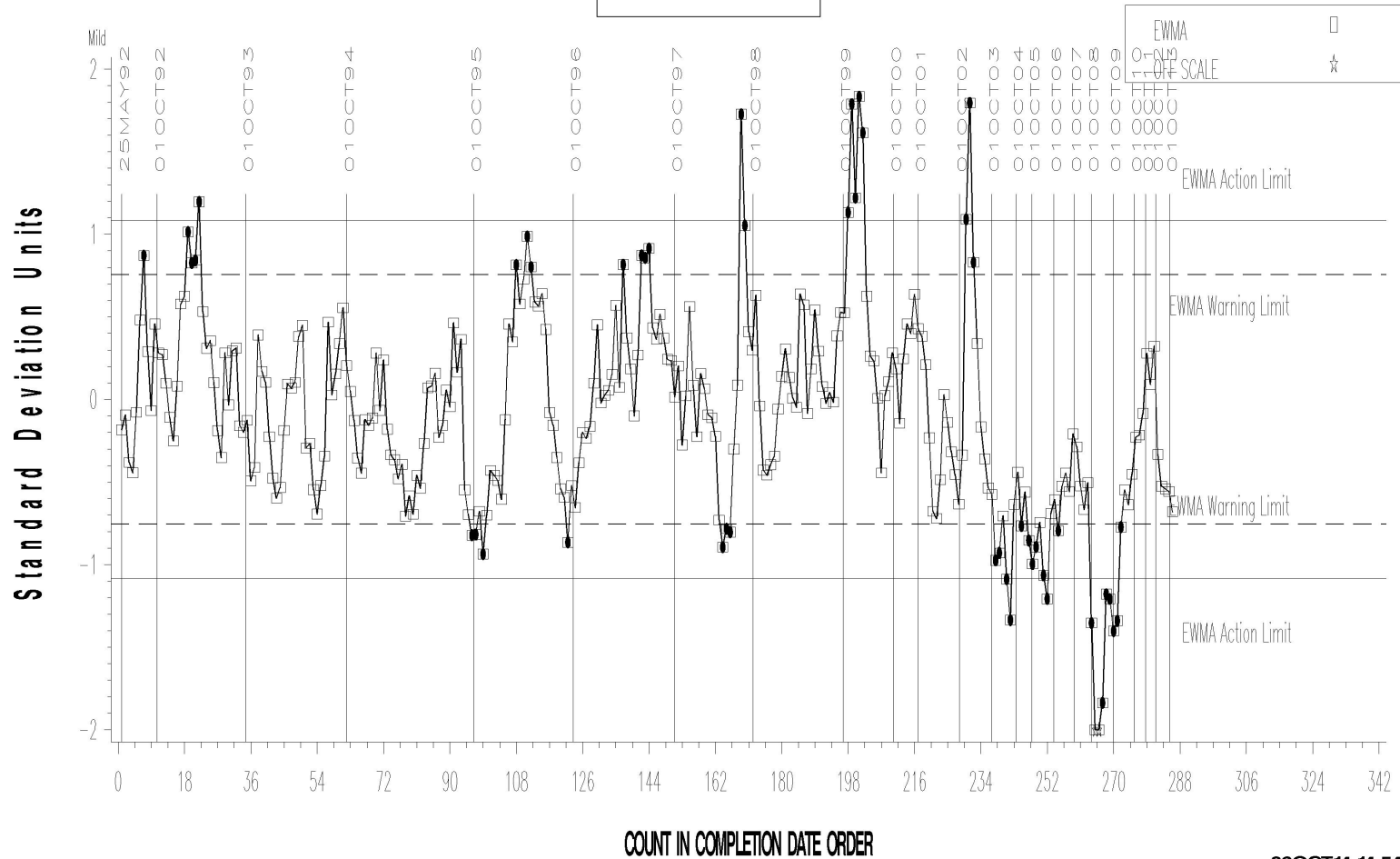
Industry control charts follow.

# High Temperature Cyclic Transmission

HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES

LTMS Severity Analysis



Severp

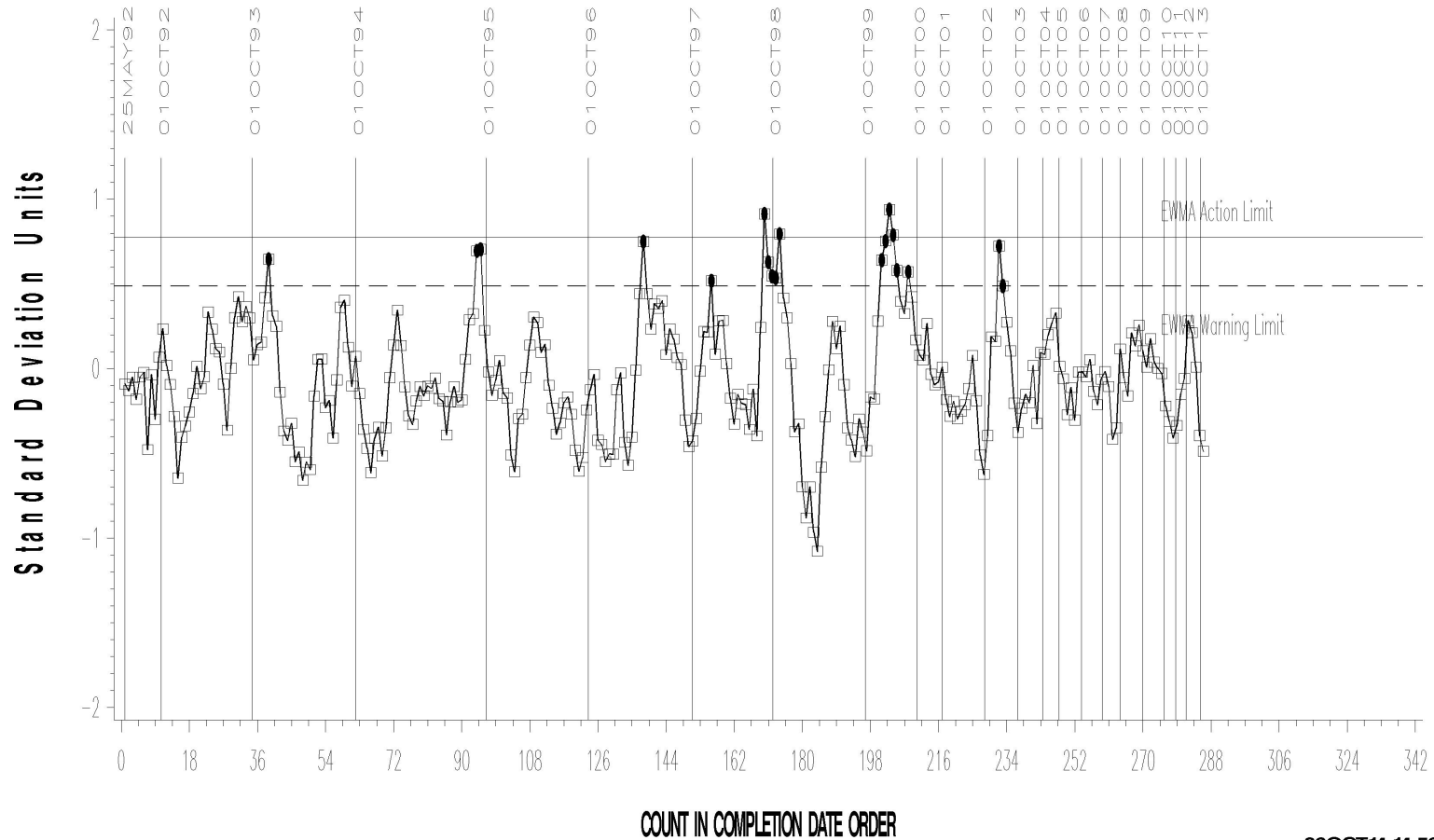
06OCT14:14:54

# High Temperature Cyclic Transmission

HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES

LTMS Precision Analysis



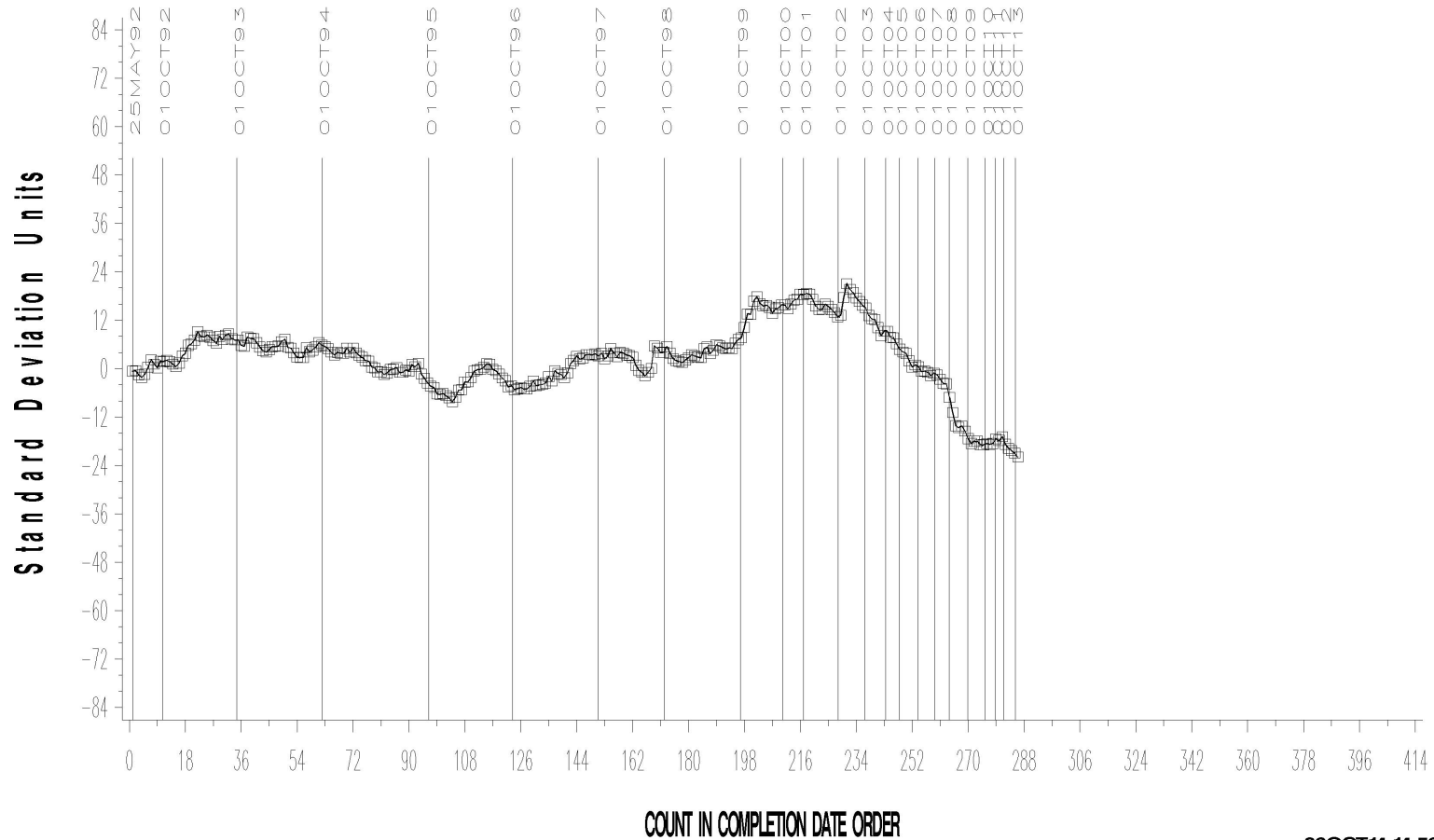
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# High Temperature Cyclic Transmission

HTCT INDUSTRY OPERATIONALLY VALID DATA

END OF TEST CYCLES

CUSUM Severity Analysis



06OCT14:14:56

# High Temperature Cyclic Transmission

## TIMELINE ADDITIONS

Effective Date	Information Letter	Event
		No additions this period.

# High Temperature Cyclic Transmission

## LAB VISITS

No HTCT lab visits were conducted during this period.

## INFORMATION LETTERS

No information letters were issued during this period.

# High Temperature Cyclic Transmission

## STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
150-2	0	3	33.7
154	2	16	176.0
155	0	1	21.0
155-1	1	29	321.0
Total	3	49	551.7

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 and L-37-1). Oil 150-2/154 is the discrimination oil used only for new hardware approval.