

## **Test Monitoring Center**

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MEMORANDUM:	09-071
DATE:	December 15, 2009
TO:	HTCBT Surveillance Panel
FROM:	Michael T. Kasimirsky Michael J. Rainnisky
SUBJECT:	Reference Oil 1005-1 Initial Test Targets

As approved by the HTCBT Surveillance Panel, Reference Oil 1005-1 is introduced into the calibration system using test targets based upon eight data points. The initial targets are shown in Table 1, below:

Table 1: Reference Oil 1005-1 Initial Test Targets (N=8)								
Parameter	Mean	Standard Deviation	Acceptance Range					
Copper Concentration	2.5986	0.1069	10.9 to 16.6					
Lead Concentration	56.2	6.8	42.7 to 69.6					

The individual test results used in generation of these test targets are shown in Table 2. The individual test results, initial test target acceptance range, and the test target acceptance range for Reference Oil 1005 for *Copper Concentration* and *Lead Concentration* are plotted in Figures 1 and 2, respectively.

The target data was screened for outliers using Standard Practice E178-08, resulting in two observations being removed from the calculation. See Table 2.

These test targets will be updated and frozen when 30 data points are available on this reference oil.

These targets are effective on December 21, 2009.

c: ftp://ftp.astmtmc.cmu.edu/docs/bench/htcbt/memos/mem09-071.pdf

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Table 2: Individual Test Results										
	LA									
TESTKEY	В	BATH	COUPON BATCH	LTMSDATE	LTMSTIME	CUC	PBC			
71556	G	2	G	20091102	17:00	15.4	52.6			
71344	В	2	Н	20091104	14:15	14.0	50.0			
71557	G	1	Н	20091104	17:00	15.0	61.6			
71558	G	1	Н	20091104	17:00	14.7	58.0			
71345	В	6	Н	20091106	14:45	13.0	48.0			
71346	В	1	Н	20091106	14:55	12.0	50.0			
71289	А	7	Н	20091117	12:48	12.0	65.0			
71290 <sup>A</sup>	Α	3	Н	20091125	12:42	490.0	32.0			
71291	Α	7	Н	20091201	11:51	12.0	64.0			
71292 <sup>B</sup>	Α	6	Н	20091202	11:57	68.0	51.0			

<sup>A</sup> Data point in red was determined to be an outlier (on CUC) on the first iteration and was removed from

target calculation. <sup>B</sup> Data point in blue was determined to be an outlier (on CUC) on the second iteration and was removed from target calculation.



## Figure 1: Change in Copper Concentration

Test Target Data Set and Acceptance Bands

HTCBT Reference Oil 1005-1





## Figure 2: Change in Lead Concentration

Test Target Data Set and Acceptance Bands

HTCBT Reference Oil 1005-1

