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Test Monitoring Center

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412-365-1000

MEMORANDUM: 16-025
DATE: July 20, 2016
TO: HTCBT Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: Reference Oil 44-4 Initial Test Targets

As part of a July 8, 2016, motion for unanimous consent, the HTCBT Surveillance Panel approved the introduction of Reference Oil 44-4 into the calibration system using test targets based upon 21 data points. The initial targets are shown in Table 1, below:

Parameter	Mean	Standard Deviation	Acceptance Range
Copper Concentration	4.9778	0.0939	120.7 to 174.5
Lead Concentration	34.7	11.6	11.9 to 57.5

The individual test results used in generation of these test targets are shown in Table 2. One data point (shown in red in the table) was screened from the data set, for high copper concentration results, and not used in the test target calculation. Standard Practice E 178 for Dealing with Outlying Observations was used for the screening.

The individual test results, initial test target acceptance range, and the test target acceptance range for Reference Oils 44-1, 44-2, and 44-3 for *Copper Concentration* and *Lead Concentration* are plotted in Figures 1 and 2, respectively.

These test targets will be updated when 30 data points are available and updated and frozen after six months of use on this reference oil.

These targets are effective on August 1, 2016.

c: <ftp://ftp.astmtmc.cmu.edu/docs/bench/htcbt/memos/mem16-025.pdf>

Distribution: electronic mail

Table 2: Individual Test Results

TESTKEY	LAB	BATH	BATCH	DATE	TIME	CUC	CUCi	PBC
116328-HTCBT	B	2	L	20160429	09:40	140.0	4.941642423	22.0
116329-HTCBT	B	2	L	20160429	09:40	158.0	5.062595033	22.0
116425-HTCBT	G	2	L	20160429	22:30	142.6	4.960043508	35.0
116426-HTCBT	G	2	L	20160429	22:30	155.2	5.044714608	34.9
116330-HTCBT	B	10	L	20160502	11:40	149.0	5.003946306	24.0
116331-HTCBT	B	10	L	20160502	11:40	158.0	5.062595033	25.0
116290-HTCBT	A	7	L	20160504	13:14	168.0	5.123963979	39.0
116291-HTCBT	A	7	L	20160504	13:15	142.0	4.955827058	56.0
116288-HTCBT	A	6	L	20160505	12:58	138.0	4.927253685	62.0
116289-HTCBT	A	6	L	20160505	12:58	132.0	4.882801923	60.0
116358-HTCBT	I	3	L	20160510	11:00	158	5.062595033	39
116359-HTCBT	I	3	L	20160510	11:00	162	5.087596335	37
116360-HTCBT	I	3	L	20160510	11:00	170	5.135798437	36
116361-HTCBT	I	3	L	20160510	11:00	156	5.049856007	36
116427-HTCBT	G	1	L	20160510	23:00	136.9	4.919250732	31.0
116428-HTCBT	G	1	L	20160510	23:00	534.8	6.281892845	11.4
116429-HTCBT	G	2	L	20160519	19:00	139.6	4.93878119	29.4
116430-HTCBT	G	2	L	20160519	19:00	130.8	4.873669439	27.0
116343-HTCBT	V	3	K	20160614	16:30	131	4.875197323	27
116344-HTCBT	V	3	K	20160614	16:30	119	4.779123493	33
116345-HTCBT	V	3	K	20160614	16:30	140	4.941642423	27
116346-HTCBT	V	3	K	20160614	16:30	135	4.905274778	26

Figure 1: Change in Copper Concentration

Test Target Data Set and Acceptance Bands

HTCBT Reference Oil 44-4

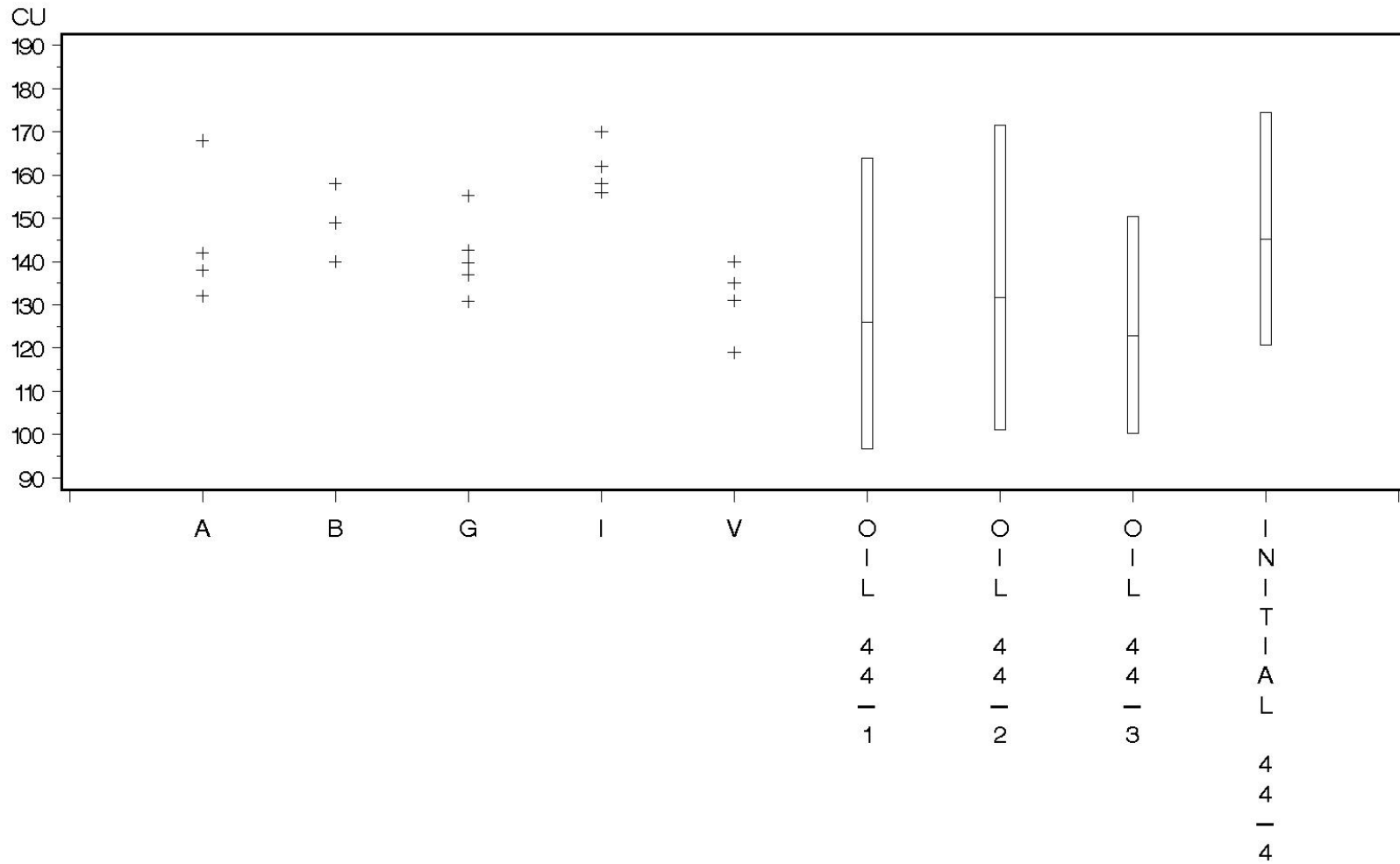


Figure 2: Change in Lead Concentration

Test Target Data Set and Acceptance Bands

HTCBBT Reference Oil 44-4

