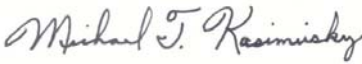




Test Monitoring Center

@ Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA

<http://astmtmc.cmu.edu>
412-365-1000

MEMORANDUM: 13-015
DATE: April 8, 2013
TO: HTCBT Surveillance Panel
FROM: Michael T. Kasimirsky 
SUBJECT: Reference Oil 44-3 Final Test Targets

As part of the January 24, 2013, teleconference, the HTCBT Surveillance Panel approved a motion to introduce Reference Oil 44-3 into the calibration system using test targets based upon 11 initial data points. These test targets were to be updated and frozen when 30 data points became available on reference oil 44-3. With the introduction of the new batch (K) of Test Coupons, a sufficient amount of data became available to perform this final update. These final targets are shown in Table 1, below:

Parameter	Mean	Standard Deviation	Acceptance Range
Copper Concentration	4.8107	0.1038	100.2 to 150.5
Lead Concentration	40.3	8.2	24.2 to 56.4

The individual test results used in generation of these test targets are shown in Table 2. The individual test results, initial & final test target acceptance range, and the test target acceptance range for Reference Oils 44-1 & 44-2 for *Copper Concentration* and *Lead Concentration* are plotted in Figures 1 and 2, respectively.

These targets are effective on April 22, 2013.

c: <ftp://ftp.astmtmc.cmu.edu/docs/bench/htcvt/memos/mem13-015.pdf>

Distribution: electronic mail

TESTKEY	LAB	LTMSAPP	BATCH	VAL	EOTDATE	EOTTIME	COM4	CUC	CUCi	PBC
89199-HTCBT	A	7	J	NI	20121221	15:32	TARGETS	115.0	4.744932128	36.0
89200-HTCBT	A	7	J	NI	20121221	15:32	TARGETS	114.0	4.736198448	40.0
89201-HTCBT	A	7	J	NI	20121221	15:32	TARGETS	108.0	4.682131227	40.0
92520-HTCBT	A	11	J	OC	20130218	16:33		117.0	4.762173935	30.0
92521-HTCBT	A	3	K	MI	20130220	16:35	KCOUPON	118.0	4.770684624	30.0
92522-HTCBT	A	3	K	MI	20130220	16:35	KCOUPON	126.0	4.836281907	30.0
92523-HTCBT	A	3	K	MI	20130220	16:35	KCOUPON	117.0	4.762173935	28.0
92524-HTCBT	A	5	J	AC	20130311	14:28		130.0	4.86753445	32.0
92525-HTCBT	A	9	J	OC	20130312	16:25		125.0	4.828313737	30.0
92526-HTCBT	A	3	J	AC	20130318	12:07		128.0	4.852030264	36.0
92527-HTCBT	A	9	J	AC	20130321	16:51		116.0	4.753590191	32.0
92528-HTCBT	A	5	J	AC	20130327	15:47		123.0	4.812184355	32.0
92530-HTCBT	A	9	J	AC	20130329	14:03		123.0	4.812184355	33.0
91628-HTCBT	B	1	J	NI	20121226	14:15	TARGETS	141.0	4.94875989	43.0
91629-HTCBT	B	3	J	NI	20130102	11:40	TARGETS	159.0	5.068904202	43.0
92915-HTCBT	B	6	J	AC	20130228	11:00		125.0	4.828313737	35.0
92916-HTCBT	B	6	K	NI	20130228	11:00	KCOUPON	106.0	4.663439094	38.0
92917-HTCBT	B	6	K	NI	20130228	11:00	KCOUPON	110.0	4.700480366	34.0
92918-HTCBT	B	6	K	NI	20130228	11:00	KCOUPON	112.0	4.718498871	38.0
92919-HTCBT	B	2	J	AC	20130318	11:10		115.0	4.744932128	38.0
90532-HTCBT	G	1	J	AG	20121217	21:00	TARGETS	132.7	4.888090941	34.9
90533-HTCBT	G	1	J	AG	20121217	21:00	TARGETS	128.9	4.85903691	43.6
90534-HTCBT	G	1	J	AG	20121217	21:00	TARGETS	133.9	4.897093253	41.6
92939-HTCBT	G	2	J	AC	20130311	21:00		129.1	4.860587298	50.1
92940-HTCBT	G	2	J	AC	20130315	21:00		112.4	4.722063937	52.1
92941-HTCBT	G	1	J	AC	20130318	21:00		123.8	4.81866736	42.7
92942-HTCBT	G	2	J	AC	20130321	16:30		135.5	4.90897164	52.4
92943-HTCBT	G	1	J	AC	20130322	20:00		131.4	4.878246106	53.2
92944-HTCBT	G	1	K	NI	20130322	20:00	KCOUPON	149.9	5.009968405	49.0
92945-HTCBT	G	1	K	NI	20130322	20:00	KCOUPON	128.3	4.854371272	45.6
92946-HTCBT	G	1	K	NI	20130322	20:00	KCOUPON	140.1	4.942356453	46.3
90851-HTCBT	I	1	J	NI	20121217	11:00	TARGETS	98	4.584967479	54
90852-HTCBT	I	1	J	NI	20121217	11:00	TARGETS	123	4.812184355	54
90853-HTCBT	I	1	J	NI	20121217	11:00	TARGETS	103	4.634728988	52

Figure 1: Change in Copper Concentration

Test Target Data Set and Acceptance Bands

HTCBT Reference Oil 44-3

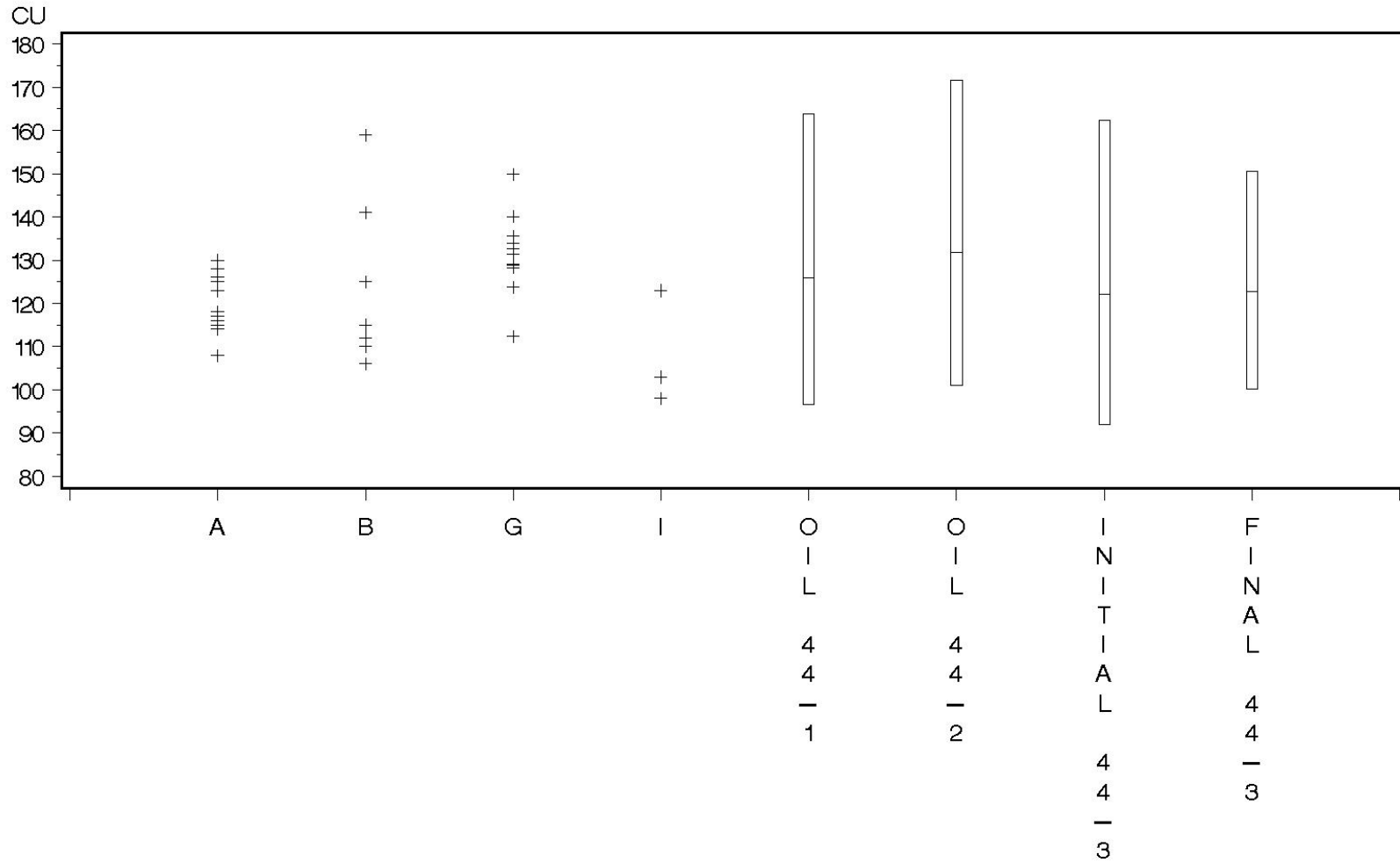


Figure 2: Change in Lead Concentration

Test Target Data Set and Acceptance Bands

HTCBT Reference Oil 44-3

