



Test Monitoring Center

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MEMORANDUM: 10-015
DATE: May 3, 2010
TO: EOEC Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: Reference Oil 1006-1 Updated Test Targets – Hydrogenated Nitrile Elastomer

During the April 23, 2010 teleconference, the EOEC Surveillance Panel approved an update to the test targets used for tests conducted on the hydrogenated nitrile elastomer material using Reference Oil 1006-1. The updated test targets are shown in Table 1, below:

Table 1: Reference Oil 1006-1 Updated Test Targets (N=28) Hydrogenated Nitrile Elastomer Material only		
Parameter	Mean	Standard Deviation
Volume Change	1.29	0.60
Hardness	-1.04	0.92
Tensile Stress	-0.90	5.00

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 updated test target acceptance range for Reference Oil 1006-1 for *Volume Change*, *Hardness*, and *Tensile Stress* are plotted in Figures 1, 2, and 3, respectively.

The test targets for *all* elastomer types will be updated and frozen in June 2010, six months after the test was first introduced, as decided by the EOEC Surveillance Panel at the time of test introduction.

These targets are effective on April 23, 2010.

c: <ftp://ftp.astmtmc.cmu.edu/docs/bench/ldeoc/memos/mem10-015.pdf>

Distribution: electronic mail

Table 2: Individual Test Results						
TESTKEY	LAB	BATH	LTMSDATE	VOLC	HARD	TENS
71727	A	2	1/4/2010	1.61	-1	3.8
71732	A	2	1/18/2010	1.74	-2	-6
71831	G	1	1/20/2010	2.03	-1	-3.3
71769	B	2	1/22/2010	1.64	0	-1.7
73685	G	1	1/27/2010	1.79	-1	1.7
71737	A	6	2/1/2010	1.59	-1	-3.1
71775	B	6	2/2/2010	1.61	-2	-4.4
73690	G	1	2/3/2010	1.88	0	9.7
73695	G	1	2/15/2010	1.76	-1	10
71739	A	2	2/17/2010	1.81	-2	5
71782	B	6	2/22/2010	1.28	-2	0.2
73710	G	1	2/23/2010	-0.46	-1	0.8
71744	A	2	3/3/2010	1.63	-2	-0.1
73715	G	1	3/4/2010	1.99	0	5.3
73716	G	1	3/8/2010	1.15	0	-14.4
73794	G	1	3/16/2010	0.53	-1	-4.9
73793	G	1	3/17/2010	0.52	0	-3.9
71749	A	2	3/18/2010	1.46	-1	0.3
71787	B	2	3/29/2010	1.71	-2	-3.8
74469	G	1	3/29/2010	0.54	0	-4
74484	G	1	3/30/2010	1.02	-2	-2.9
74474	G	1	4/1/2010	0.65	-1	-5.1
71754	A	2	4/7/2010	1.09	-3	-0.7
71788	B	6	4/9/2010	0.53	1	2.8
71793	B	6	4/19/2010	1.63	-1	-2.4
71798	B	2	4/21/2010	1.63	-1	1.1
74479	G	1	4/21/2010	0.65	-2	-5.1
71759	A	2	4/22/2010	1.23	0	-0.2

Figure 1: Test Target Data Set and Acceptance Bands

LDEOCN – Reference Oil 1006–1

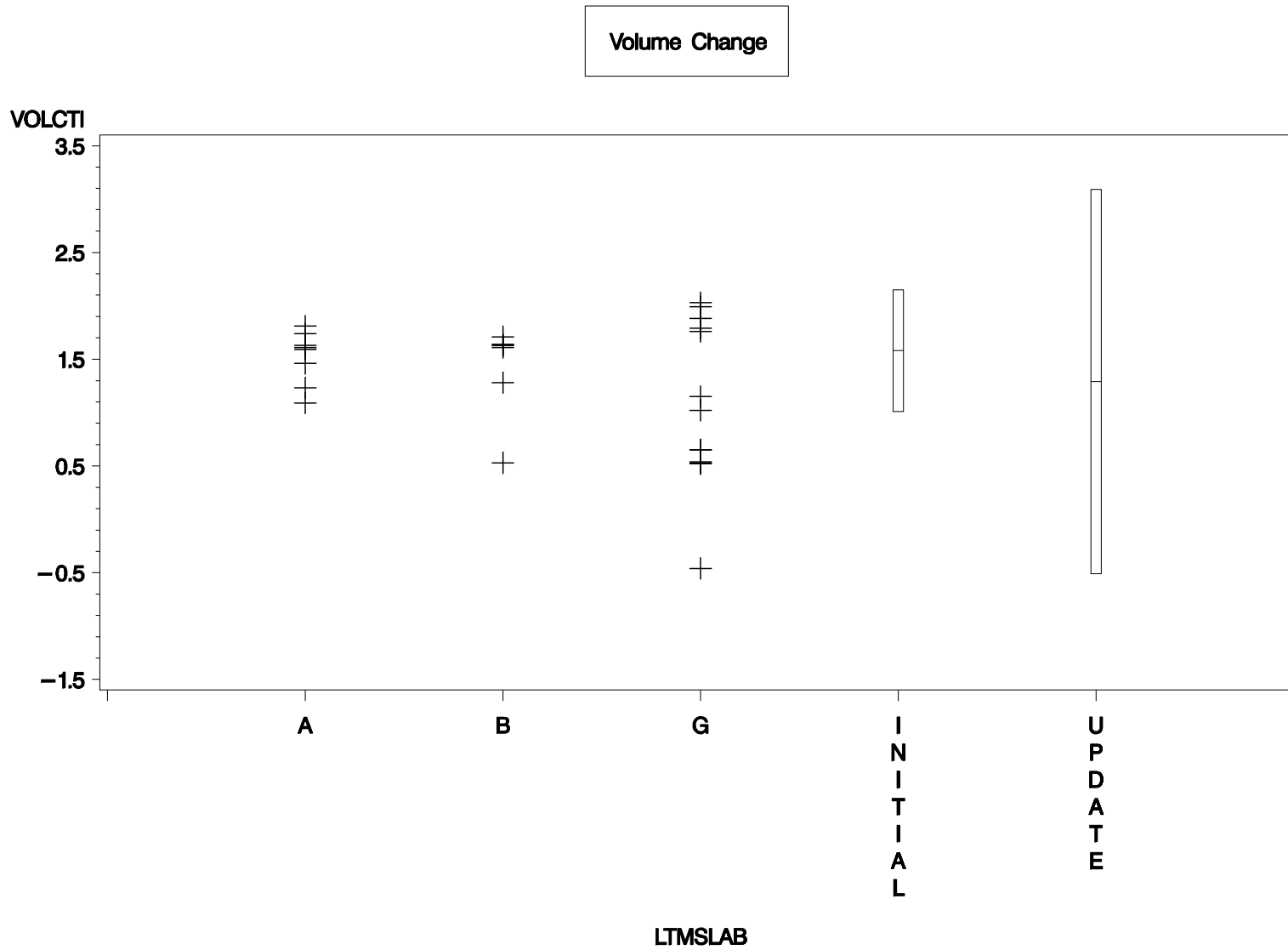


Figure 2: Test Target Data Set and Acceptance Bands
LDEOCN – Reference Oil 1006–1

Shore Hardness

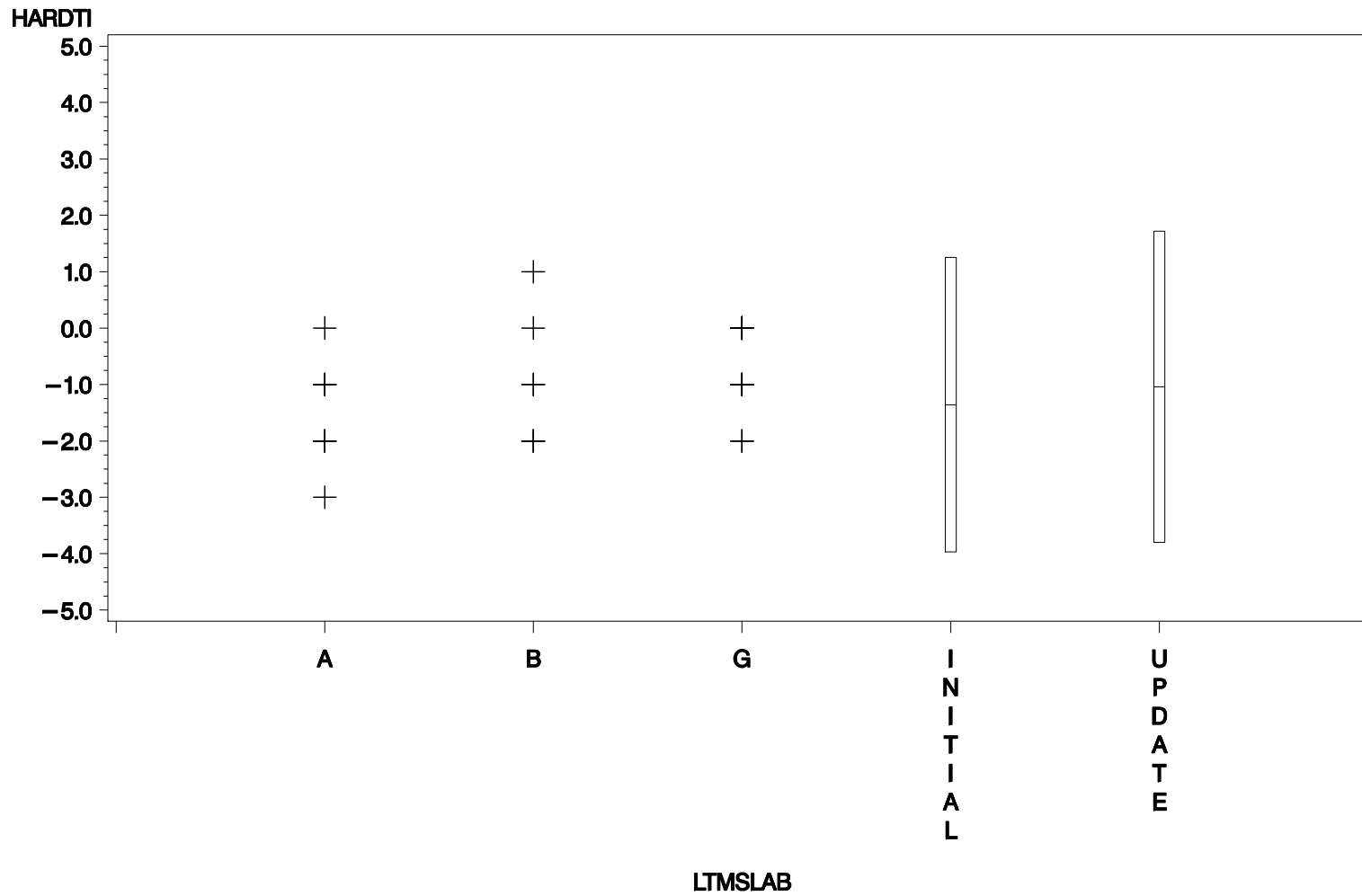


Figure 3: Test Target Data Set and Acceptance Bands
LDEOCN – Reference Oil 1006–1

