



Test Monitoring Center

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

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

MEMORANDUM: 13-042
DATE: July 5, 2013
TO: Mack Test Surveillance Panel
FROM: Sean A. Moyer
SUBJECT: Updated Targets for Reference Oil 822-1

On the July 2nd Mack Test Surveillance Panel conference call, the panel approved updated targets for reference oil 822-1 based upon data presented at the meeting. Please note that these targets were generated using data with all correction factors and lab severity adjustments applied. The updated targets are shown in the following table:

Parameter	Mean	Standard Deviation
SOOT4	4.09	0.20
SOOT	5.81	0.50
SOOT5	6.48	0.61
MRV	13948	584

These targets are effective for reference test acceptability for all tests that complete on or after July 3rd 2013. The Standard Deviations show in the table above are also the new Severity Adjustment Standard Deviations and will be effective for calculating SAs with any test completing on or after July 3rd 2013 as well.

Attached Figures 1 through 4 plot the data against targets for SOOT4, SOOT, SOOT5 and MRV. Table 1 lists the corrected and severity adjusted data for reference oil 822-1 that was used in the target calculations.

<ftp://ftp.astmtmc.cmu.edu/docs/diesel/mack/memos/mem13-042.pdf>

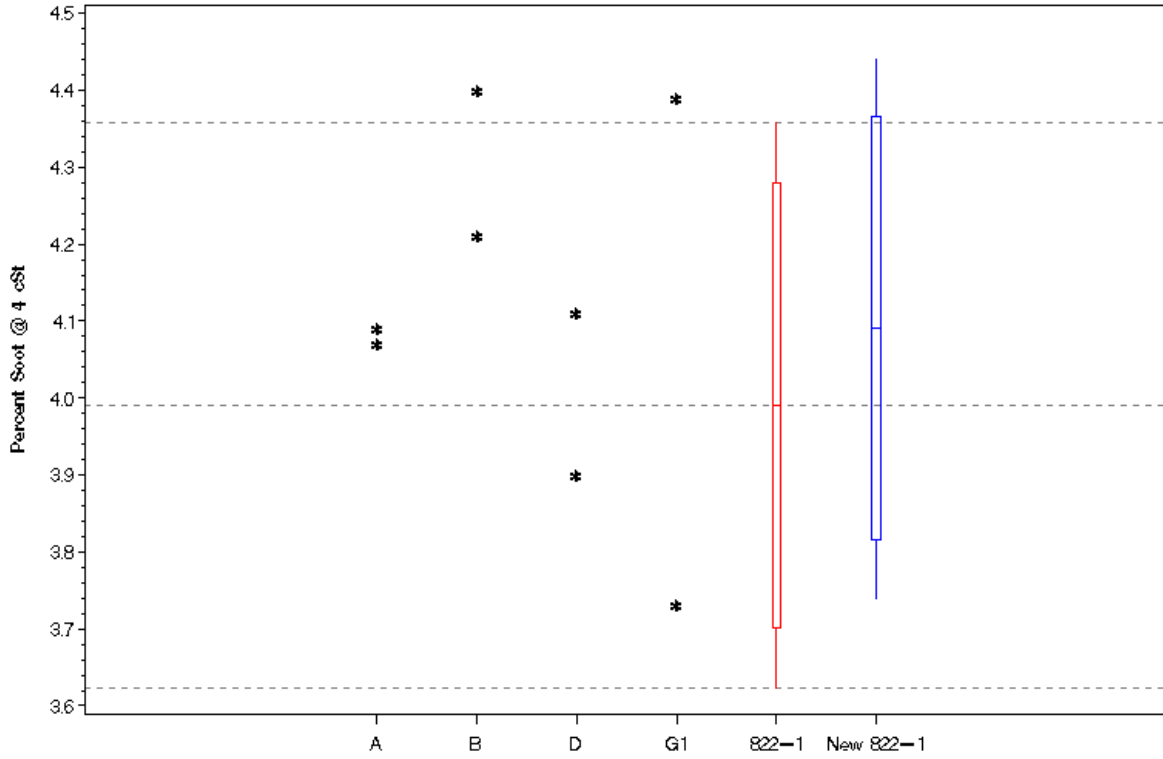
c: Frank Farber, TMC
Jeff Clark, TMC

Distribution: Email

Mack T11: Updated 822-1 Targets: SOOT4 Figure 1

Current 822-1 Targets: Mean = 3.99, Std = 0.21, k = 1.75

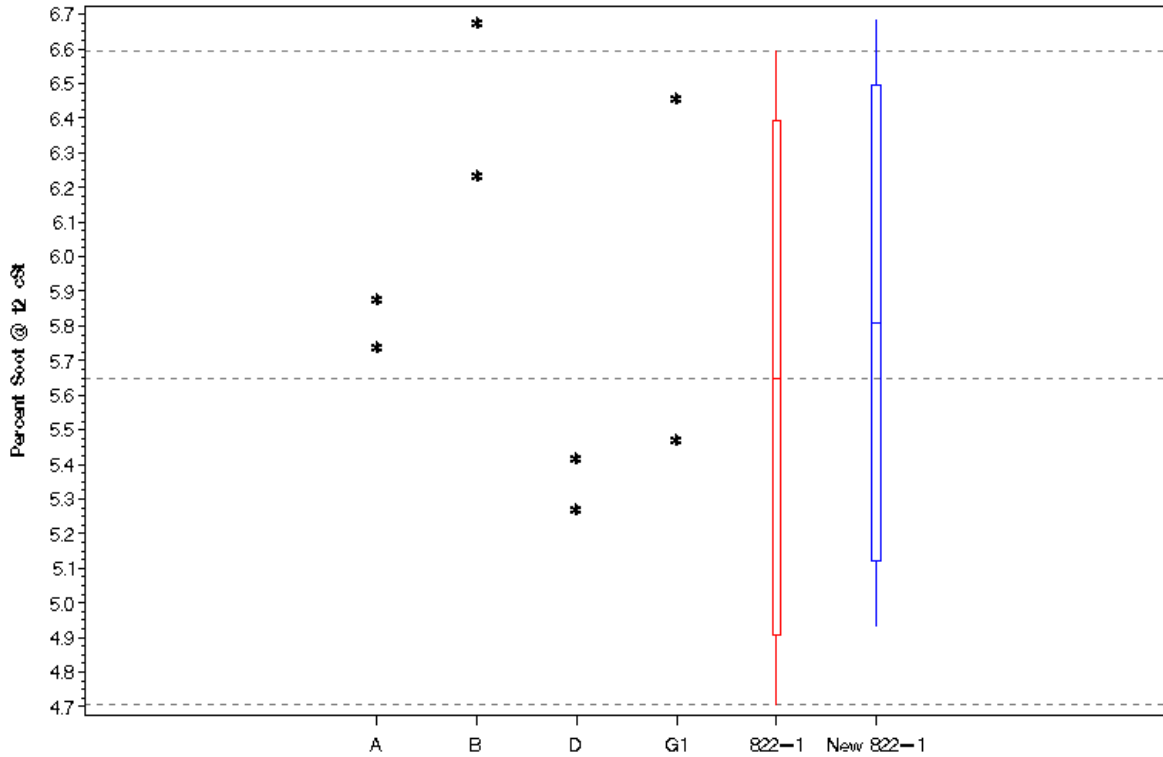
New 822-1 Targets: Mean = 4.09, Std = 0.20



Mack T11: Updated 822-1 Targets: SOOT Figure 2

Current 822-1 Targets: Mean = 5.65, Std = 0.54, k = 1.75

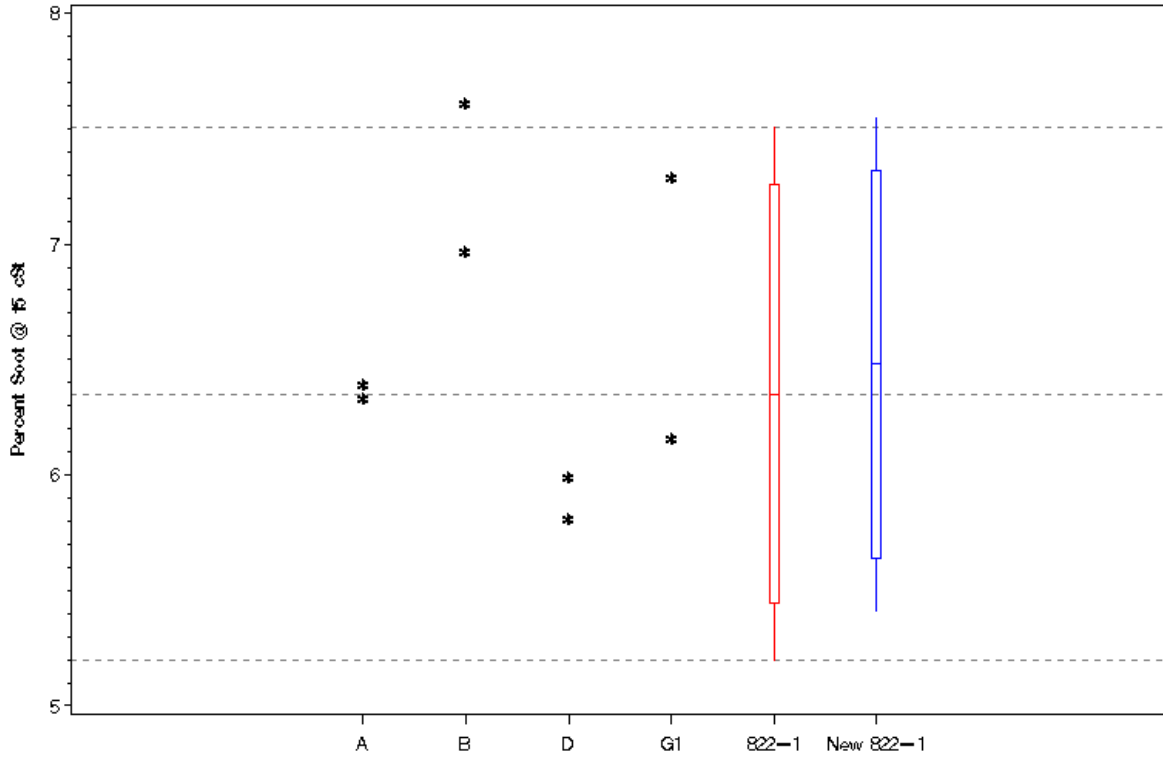
New 822-1 Targets: Mean = 5.81, Std = 0.50



Mack T11: Updated 822-1 Targets: SOOT5 **Figure 3**

Current 822-1 Targets: Mean = 6.35, Std = 0.66, k = 1.75

New 822-1 Targets: Mean = 6.48, Std = 0.61



Mack T11: Updated 822-1 Targets: MRV **Figure 4**

Current 822-1 Targets: Mean = 14408, Std = 314, k = 1.75

New 822-1 Targets: Mean = 13948, Std = 584

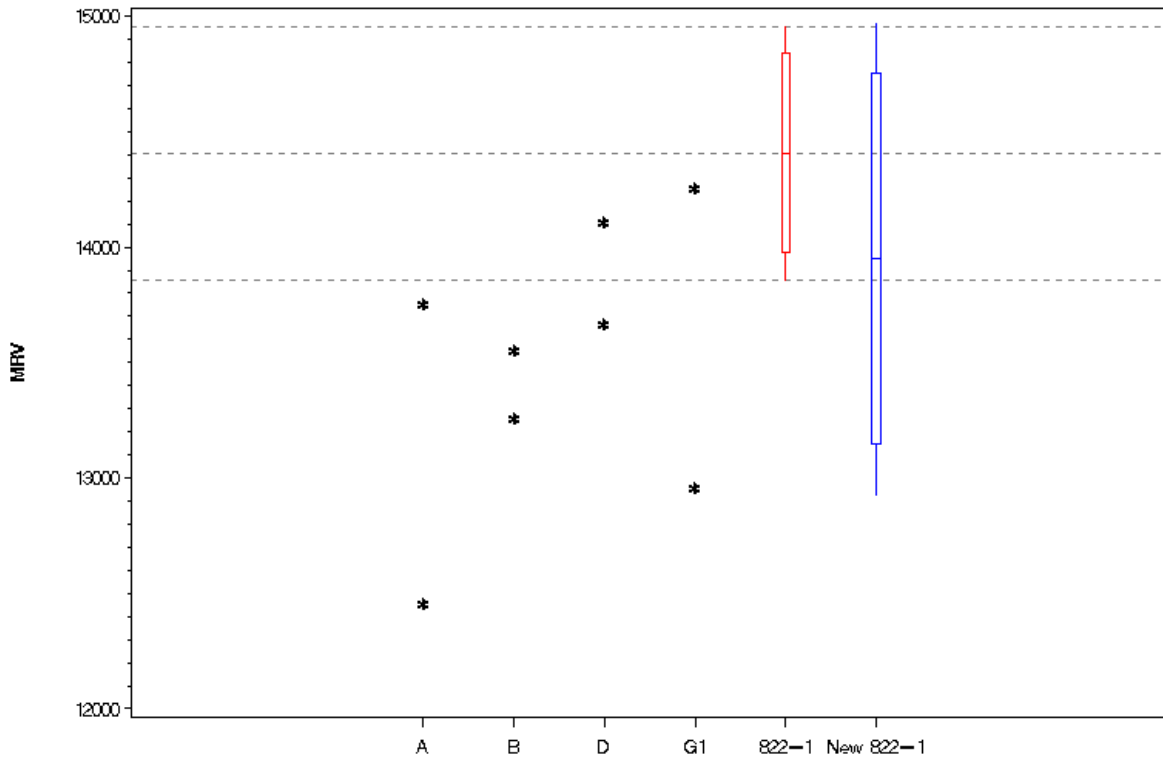


Table 1
Reference Data Used to Generate Targets*

Lab	SOOT4	SOOT	SOOT5	MRV
A	4.09	5.56	6.11	14835
B	4.22	6.44	7.30	14431
D	3.9	5.27	5.81	14109
G1	3.73	5.33	6.16	14256
B	4.21	6.23	6.97	13556
A	4.07	5.73	6.22	13775
D	4.11	5.42	5.99	13665
G1	4.39	6.46	7.29	12956

*All data corrected using current correction factors and severity adjusted using current lab severity adjustments.