

Test Monitoring Center

@ Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

MEMORANDUM: 17-027

DATE: August 18, 2017

TO: EOWT Surveillance Panel

FROM: Michael T. Kasimirsky

SUBJECT: Reference Oil 77-3 Target Update

On July 20, 2015, the EOWT Surveillance Panel approved a motion to introduce reference oil 77-3 into the calibration system, based upon a series of donated tests, to be completed by May 31, 2016. The motion also contained provisions for these targets to be updated and frozen, based on all data completed within six months after the first usage of reference oil 77-3 in the calibration system.

The final test targets, based upon all data points to date, are shown in the following table:

Reference Oil 77-3						
WT%	N	Mean	Std Dev	K	Target Range	
0.6	140	-10.23	2.78	1.96	-15.68	-4.78
1.0	140	-7.82	2.34	1.96	-12.41	-3.23
2.0	140	-8.8	2.47	1.96	-13.65	-3.95
3.0	140	-10.15	2.21	1.96	-14.49	-5.82

Note that the upper and lower limits shown in the "Target Range" block are the official test targets for the EOWT test; the target mean and standard deviation are shown for information purposes only.

These targets are effective for all tests completed on or after September 1, 2017.

Plots of the initial and updated test targets, along with the final test targets used for reference oil 77-2, and the individual data points used to calculate the targets are shown on the following pages. A spreadsheet of the data used to calculate these targets can be found at the following link:

 $\underline{http://www.astmtmc.cmu.edu/ftp/refdata/bench/eowt/data/EOWT\%20Oil\%2077-3\%20Final\%20Target\%20Data.xls}$

MTK/mtk

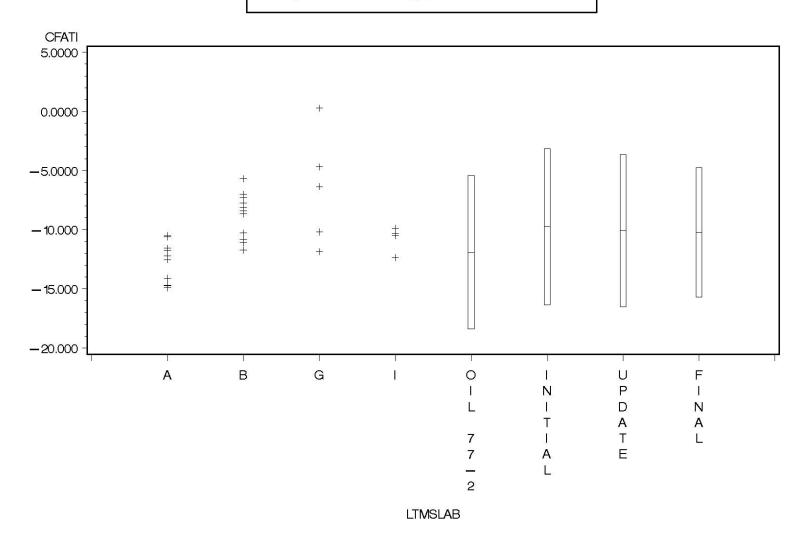
c: ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/memo/mem17-027.mtk.pdf

Distribution: email

EOWT Reference Oil 77-3

Test Target Data Set and Acceptance Bands

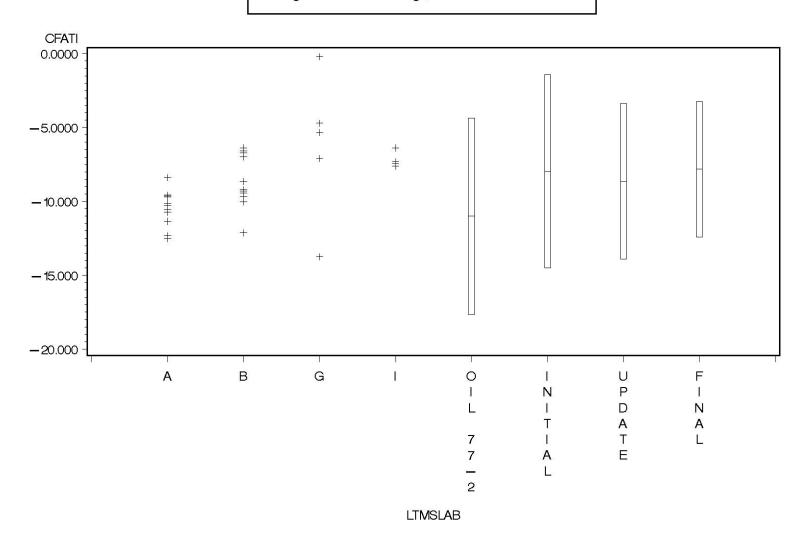
Change in Flowrate Average, 0.6% Water Concentration



EOWT Reference Oil 77-3

Test Target Data Set and Acceptance Bands

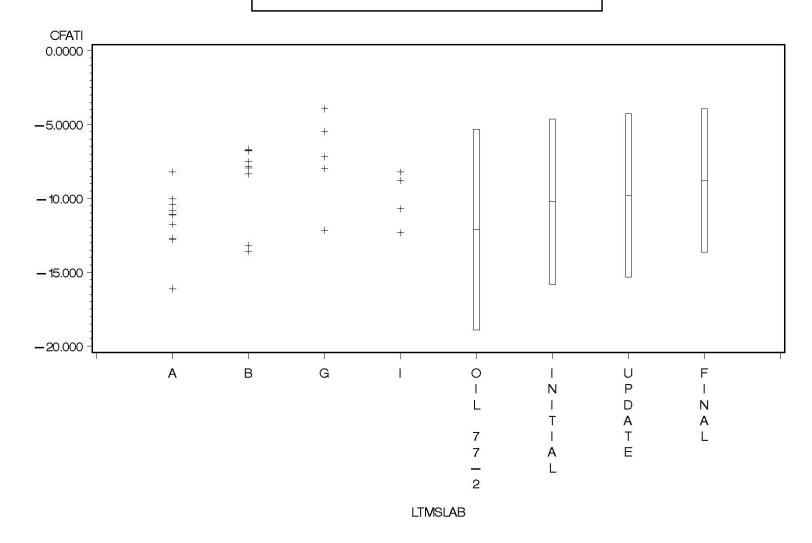
Change in Flowrate Average, 1.0% Water Concentration



EOWT Reference Oil 77-3

Test Target Data Set and Acceptance Bands

Change in Flowrate Average, 2.0% Water Concentration



EOWT Reference Oil 77-3 Test Target Data Set and Acceptance Bands

Change in Flowrate Average, 3.0% Water Concentration

