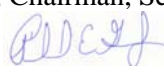




Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
(412) 365-1000

MEMORANDUM: 07-076
DATE: November 16, 2007
TO: William Buscher, Chairman, Sequence IVA Surveillance Panel Chair
FROM: Richard Grundza 
SUBJECT: Sequence IVA Reference Oil Tests Statistics, Reference Oil 1009

The following are the statistics for Sequence IVA reference oil 1009, based on 29 test results. These targets are effective for reference oil tests completing on or after November 14, 2007. Targets were calculated using severity adjusted results.

Parameter	Mean	Standard Deviation
ACW	18.76	7.05

Figure 1 plots the results by laboratory and the Shewhart acceptance ranges for ACW, respectively. Please note that laboratory results in Figures 1 have not been severity adjusted. Figure 2 summarizes the uncorrected results and Figure 3 summarizes the corrected results, where appropriate.

Attachments

REG/reg

c: Sequence IVA Surveillance Panel

John Zalar, TMC

Frank Farber, TMC

<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiv/memos/mem07-076.pdf>

Distribution: email

Figure 1

Sequence IVA (Reference Oil 1009) Test Target Data Set and Shewart Severity Limits

Average Cam Wear, Microns

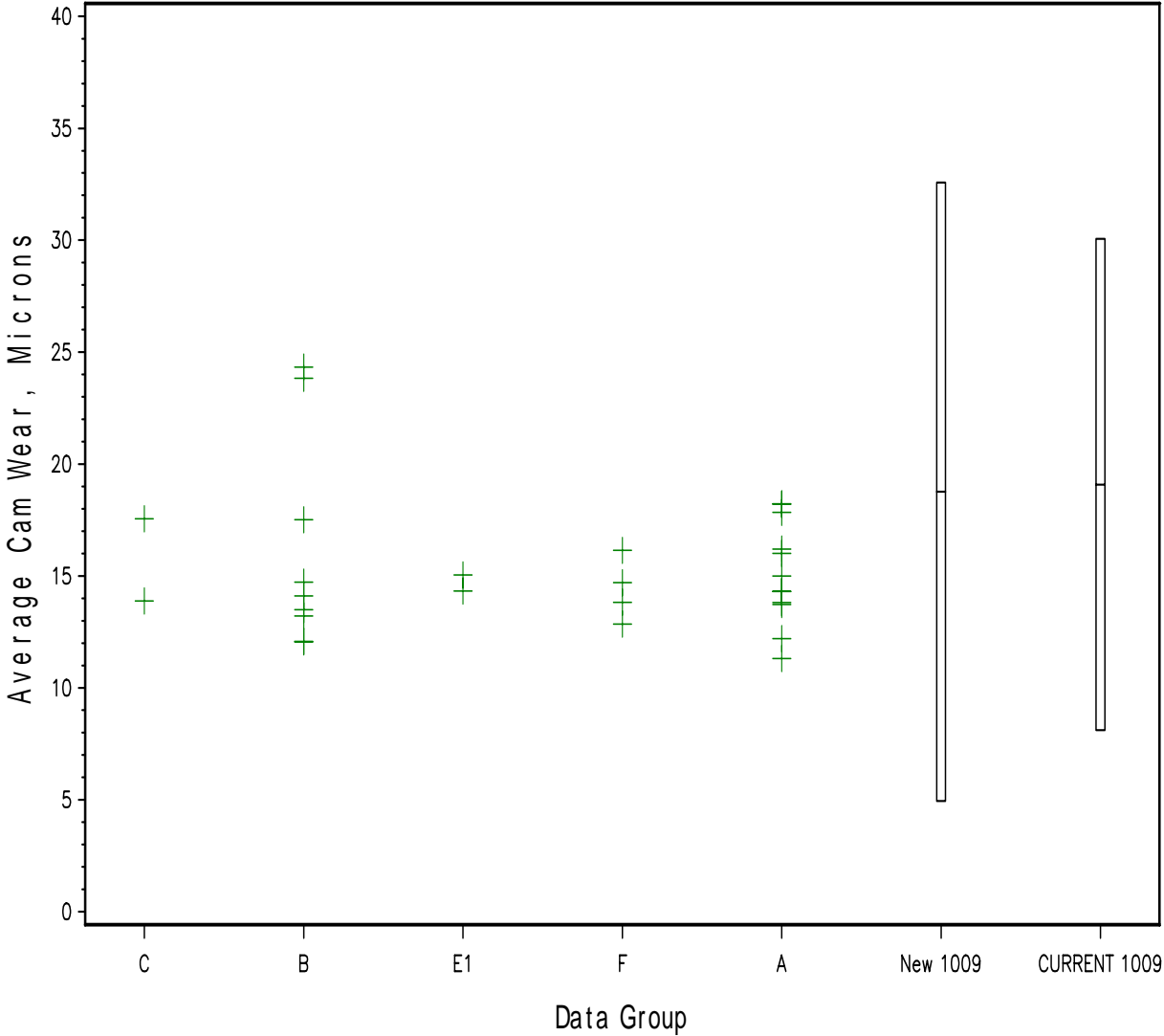


Figure 2 Unadjusted Data

OILCODE	LTMSLAB	LTMSAPP	IND	VAL	LTMSTDATE	LTMSTIME	ACW
44877	C	1	1009	AG	12/16/2002	7:57	13.88
44879	C	1	1009	AC	3/20/2004	18:55	17.55
44888	B	1A	1009	AG	11/9/2002	11:05	24.33
44890	B	2A	1009	AC	7/26/2003	4:50	13.5
44900	E1	1	1009	AG	10/26/2002	16:44	14.33
44901	E1	1	1009	AC	7/14/2003	13:53	15.04
44911	F	1	1009	AG	10/13/2002	2:05	16.14
50247	F	1	1009	AC	4/6/2004	18:15	12.85
44919	A	1	1009	AG	10/15/2002	2:24	15
44920	A	4	1009	AC	6/22/2003	11:37	16.01
44921	A	1	1009	AC	11/22/2003	14:51	18.2
46569	A	3	1009	AC	11/3/2004	01:16	13.72
50628	A	4	1009	AC	11/7/2004	05:40	11.31
50494	B	1A	1009	AC	12/21/2004	22:47	12.05
50629	A	3	1009	AC	5/17/2005	22:45	13.82
52638	A	2	1009	AC	5/18/2005	08:25	14.32
52357	B	2A	1009	AC	9/04/2005	22:55	14.11
50248	F	1	1009	AC	11/13/2005	01:55	14.70
58069	A	3	1009	AC	12/7/2005	05:17	16.20
56391	B	1A	1009	AC	2/12/2006	18:02	13.21
44887	B	2A	1009	OC	3/6/2006	00:30	23.83
44884	B	2A	1009	AC	3/12/2006	21:20	17.51
58070	A	1	1009	OC	08/15/2006	22:17	14.3
53975	A	1	1009	AC	08/22/2006	20:05	12.2
60173	B	1A	1009	AC	10/04/2006	16:30	12.08
60841	A	4	1009	AC	03/18/2007	20:33	17.84
65367	B	2A	1009	AC	04/12/2007	11:23	14.72
58037	F	1	1009	AC	06/06/2007	19:00	13.83
60842	A	4	1009	AC	08/12/2007	04:42	18.23
52638	A	2	1009	AC	5/18/2005	08:25	14.32

Figure 3 Severity Adjusted Data

OILCODE	LTMSLAB	LTMSAPP	IND	VAL	LTMSTIME	ACW	
44877	C	1	1009	AG	12/16/2002	7:57	13.88
44879	C	1	1009	AC	3/20/2004	18:55	17.55
44888	B	1A	1009	AG	11/9/2002	11:05	24.33
44890	B	2A	1009	AC	7/26/2003	4:50	23.914
44900	E1	1	1009	AG	10/26/2002	16:44	26.583
44901	E1	1	1009	AC	7/14/2003	13:53	28.013
44911	F	1	1009	AG	10/13/2002	2:05	16.14
50247	F	1	1009	AC	4/6/2004	18:15	12.85
44919	A	1	1009	AG	10/15/2002	2:24	15
44920	A	4	1009	AC	6/22/2003	11:37	16.01
44921	A	1	1009	AC	11/22/2003	14:51	18.2
46569	A	3	1009	AC	11/3/2004	01:16	13.72
50628	A	4	1009	AC	11/7/2004	05:40	11.31
50494	B	1A	1009	AC	12/21/2004	22:47	12.05
50629	A	3	1009	AC	5/17/2005	22:45	13.82
52638	A	2	1009	AC	5/18/2005	08:25	14.32
52357	B	2A	1009	AC	9/04/2005	22:55	23.779
50248	F	1	1009	AC	11/13/2005	01:55	14.70
58069	A	3	1009	AC	12/7/2005	05:17	26.517
56391	B	1A	1009	AC	2/12/2006	18:02	31.479
44887	B	2A	1009	OC	3/6/2006	00:30	40.555
44884	B	2A	1009	AC	3/12/2006	21:20	17.51
58070	A	1	1009	OC	08/15/2006	22:17	14.3
53975	A	1	1009	AC	08/22/2006	20:05	12.2
60173	B	1A	1009	AC	10/04/2006	16:30	12.08
60841	A	4	1009	AC	03/18/2007	20:33	17.84
65367	B	2A	1009	AC	04/12/2007	11:23	14.72
58037	F	1	1009	AC	06/06/2007	19:00	25.137
60842	A	4	1009	AC	08/12/2007	04:42	18.23