



Test Monitoring Center

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MEMORANDUM: 05-037
DATE: May 20, 2005
TO: L-37 Surveillance Panel
FROM: Donald Lind
SUBJECT: Updated Reference Oil Test Targets for Gear Batch V1L686/P4L626A

At the May 18, 2005 L-37 Surveillance Panel Teleconference Meeting, the panel approved the updated reference oil test targets for lubrified hardware, gear batch V1L686/P4L626A. The approved reference oil targets, plots and data are attached.

These targets are effective for all tests completed on or after May19, 2005.

DML/dml

Attachments

c: <ftp://ftp.astmtmc.cmu.edu/docs/gear/l37/memos/mem05-037.pdf>

Distribution: Electronic Mail

LUBRITED HARDWARE							
GEAR BATCH V1L686/P4L626A							
PINION TEST TARGETS							
	Reference Oil 128-1 ^A				Reference Oil 151-3		
	N	Mean	Standard Deviation		N	Mean	Standard Deviation
WEAR	22	6.27	0.703		26	6.62	0.571
RIDGING	22	-1.403	0.1821		26	-1.364	0.2930
RIPPLIN G	22	-1.154	0.4353		26	-0.523	0.2195
SPITTING	22	0.393	0.3124		26	0.344	0.3689

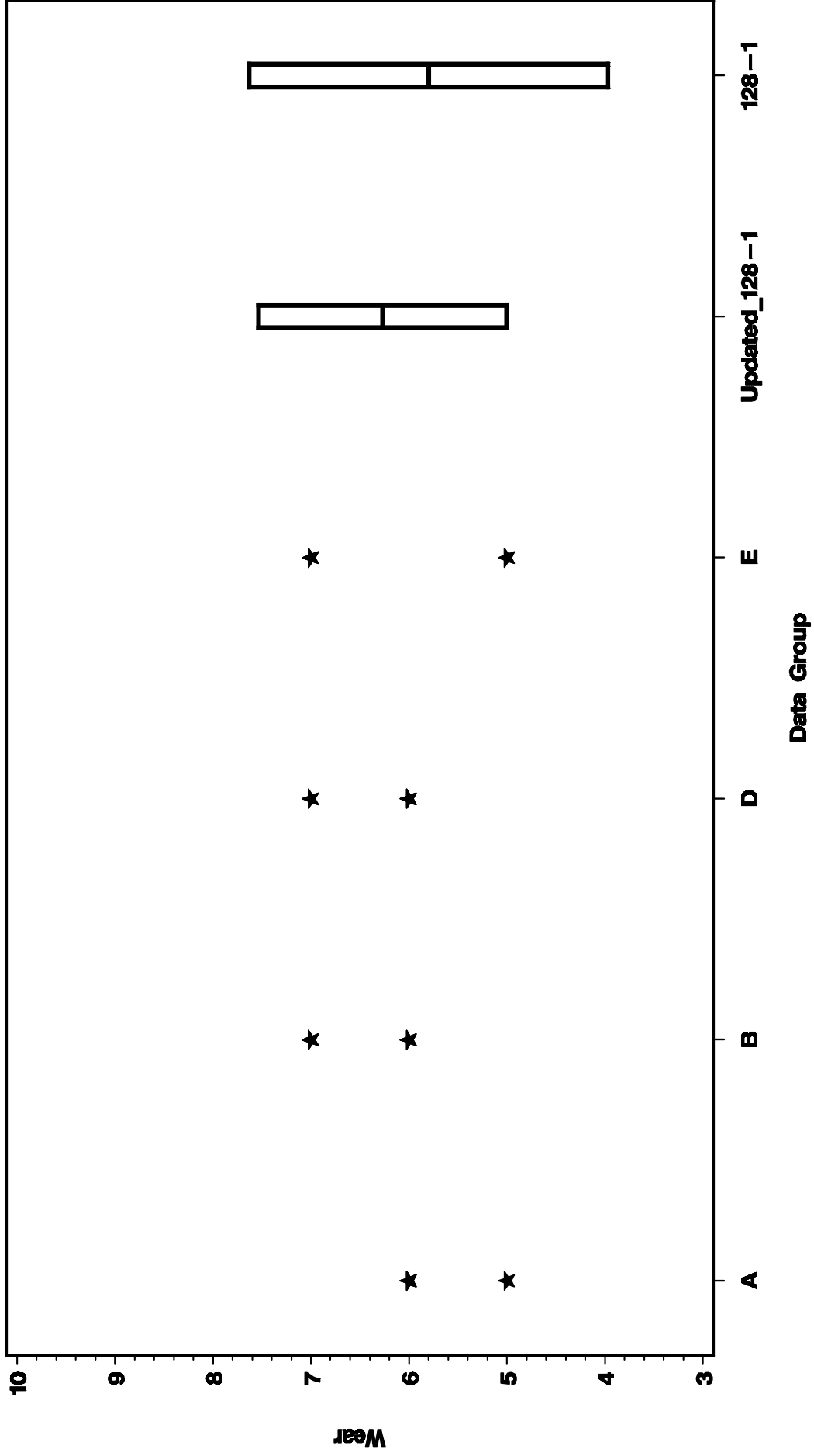
LUBRITED HARDWARE							
GEAR BATCH V1L686/P4L626A							
RING TEST TARGETS							
	Reference Oil 128-1 ^A				Reference Oil 151-3		
	N	Mean	Standard Deviation		N	Mean	Standard Deviation
WEAR	22	7.05	1.046		26	7.19	1.059
RIDGING	22	-1.114	0.4361		26	-0.956	0.7034
RIPPLIN G	22	0.121	0.5956		26	0.102	0.5585
SPITTING	22	0.516	0.1557		26	0.557	0.1184

^A Use reference oil 128-1 targets for reference oil 128-2.

L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 128-1 (Bands Include Merit Ratings of 5, 6, & 7)

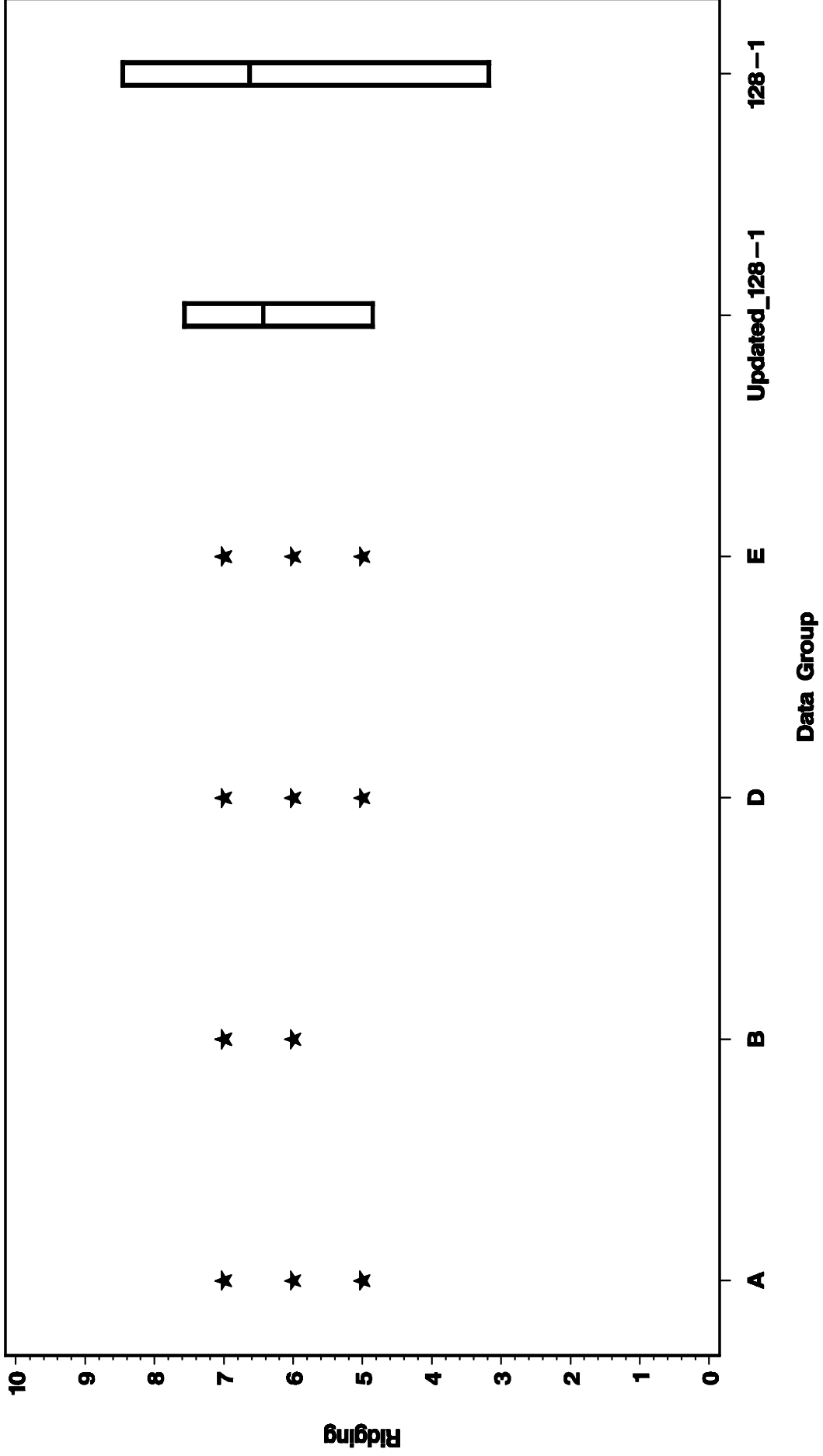
Pinion Wear



L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 128--1 (Bands Include Merit Ratings of 5, 6, & 7)

Pinion Ridging

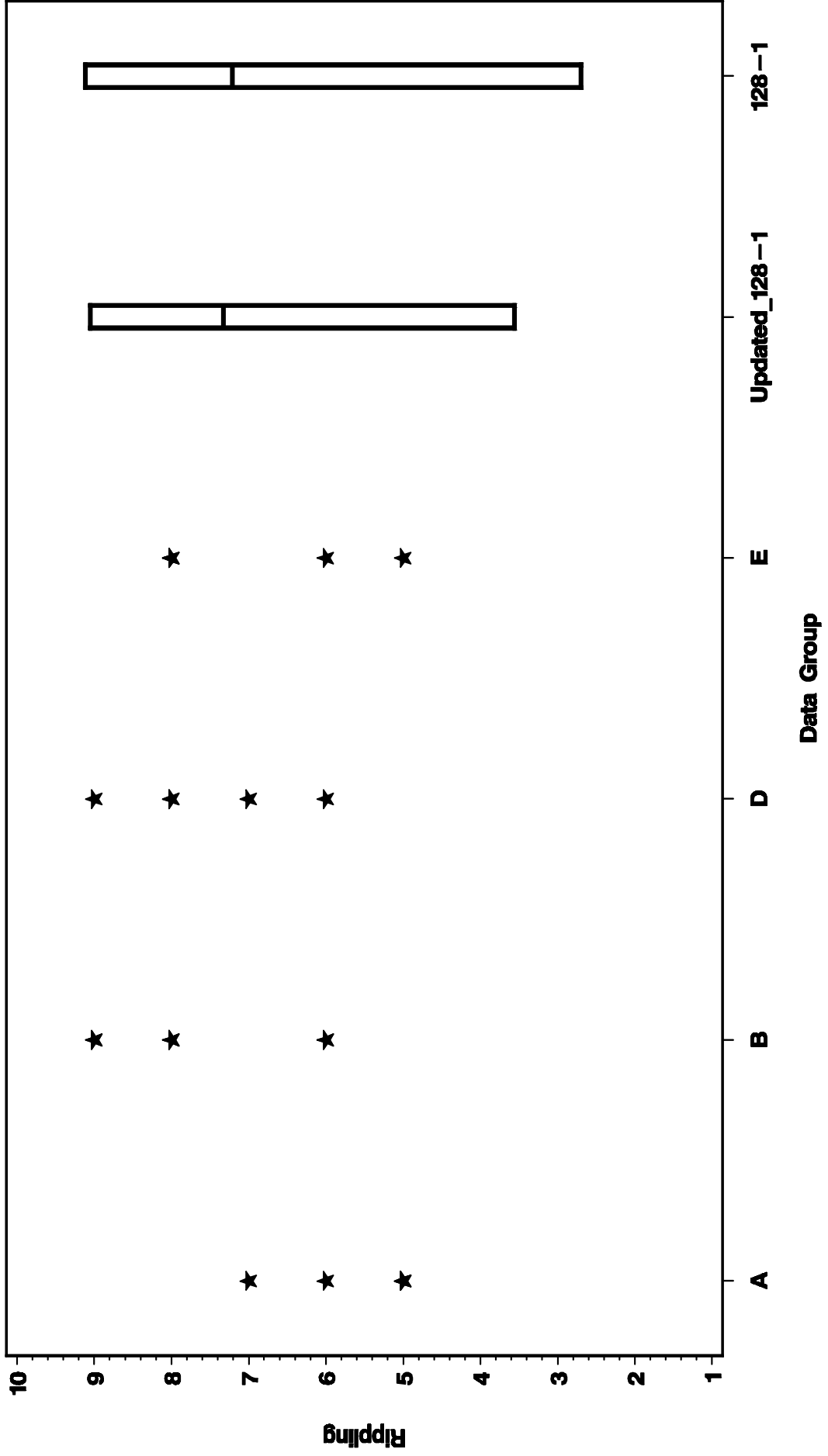


L-37 Lubrited Hardware, Pinion Batch V1L686/P4L626A

Updated Test Target Data Set and Shewhart Severity Limits

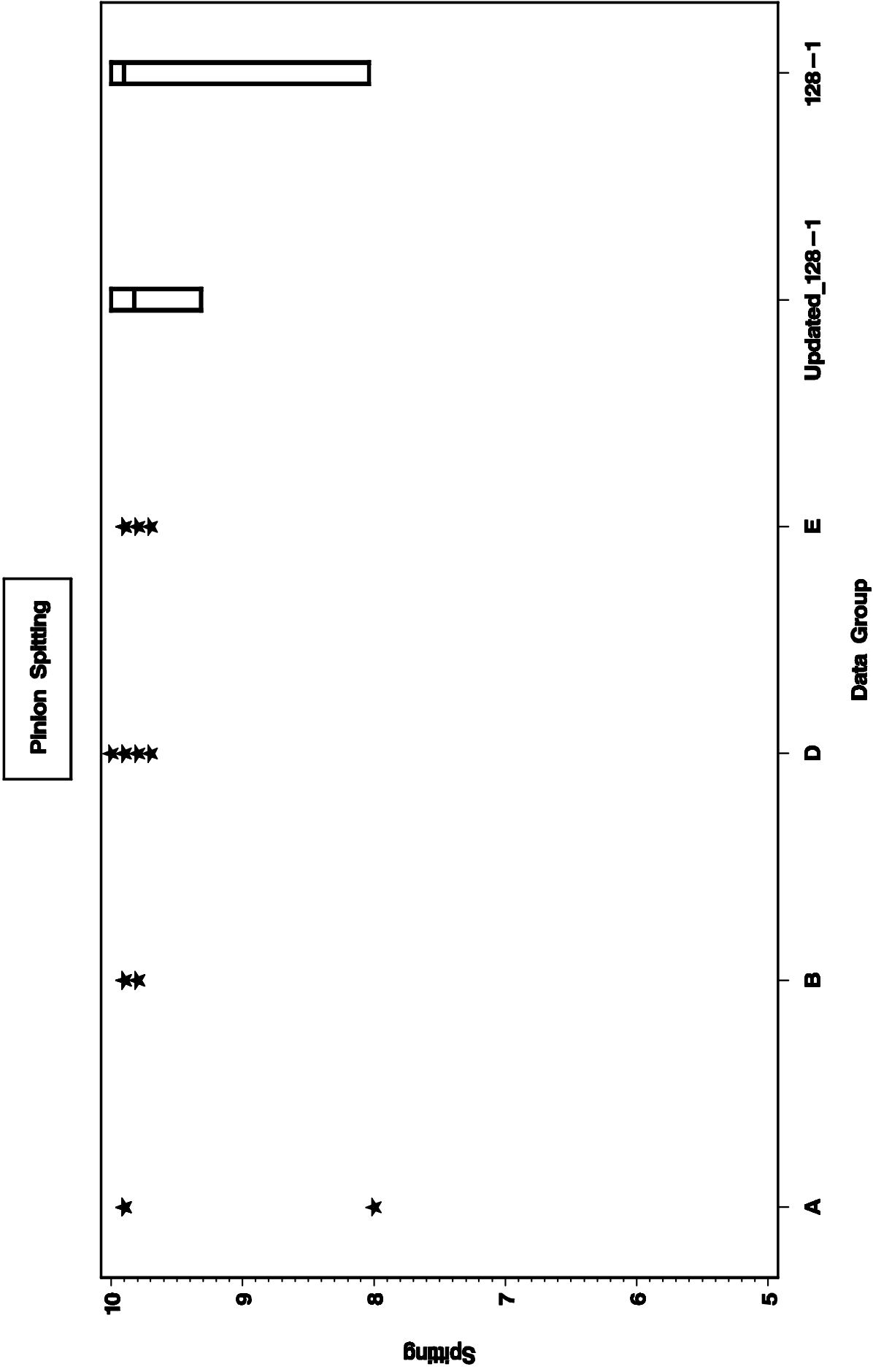
Reference Oil 128--1 (Bands Include Merit Ratings of 4 thru 9)

Pinion Rippling



L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

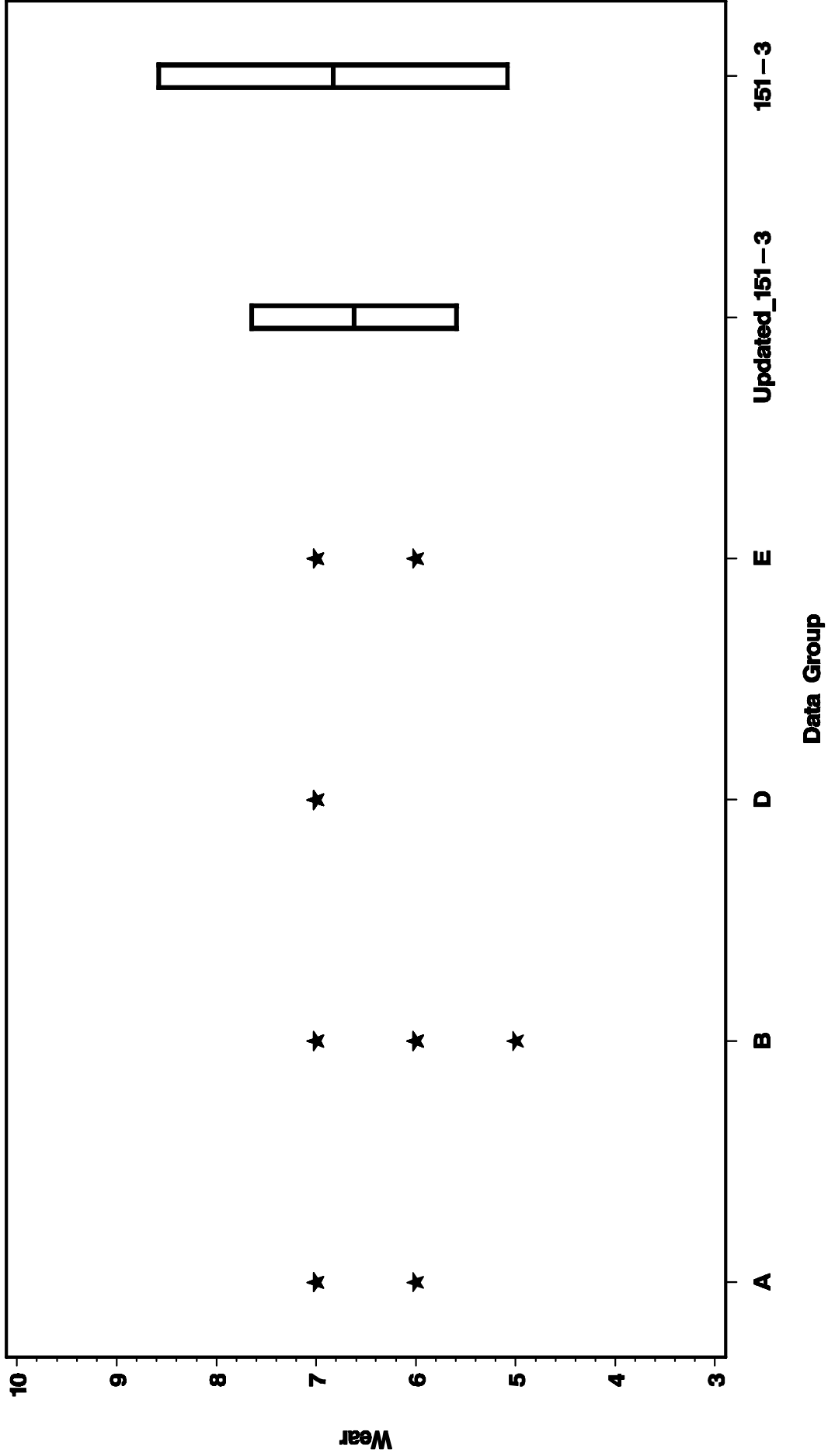
Reference Oil 128--1 (Bands Include Merit Ratings of 9.3 Thru 10)



L-37 Lubrited Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 151-3 (Bands Include Merit Ratings of 6, & 7)

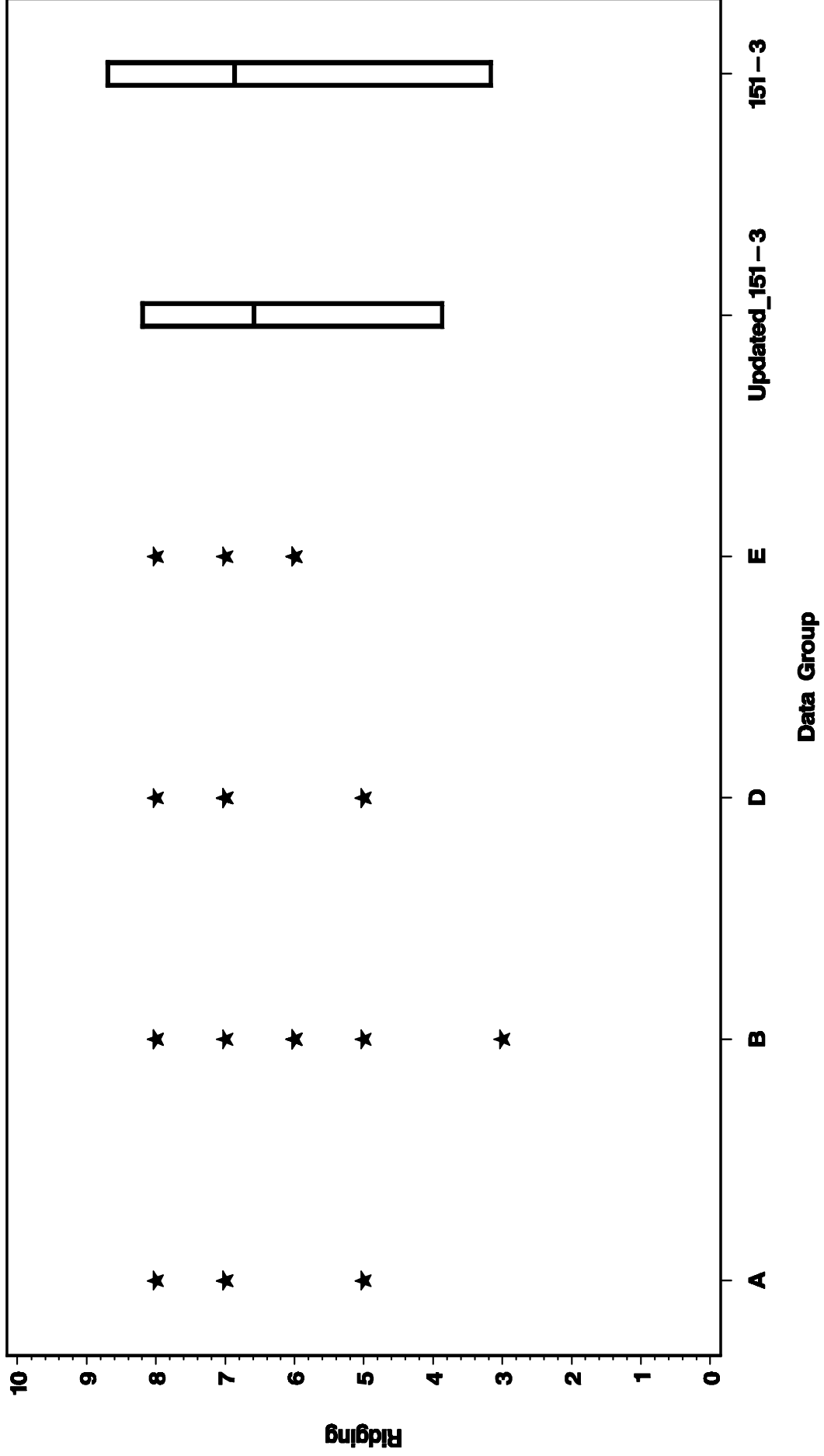
Pinion Wear



L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 151-3 (Bands Include Merit Ratings of 4 thru 8)

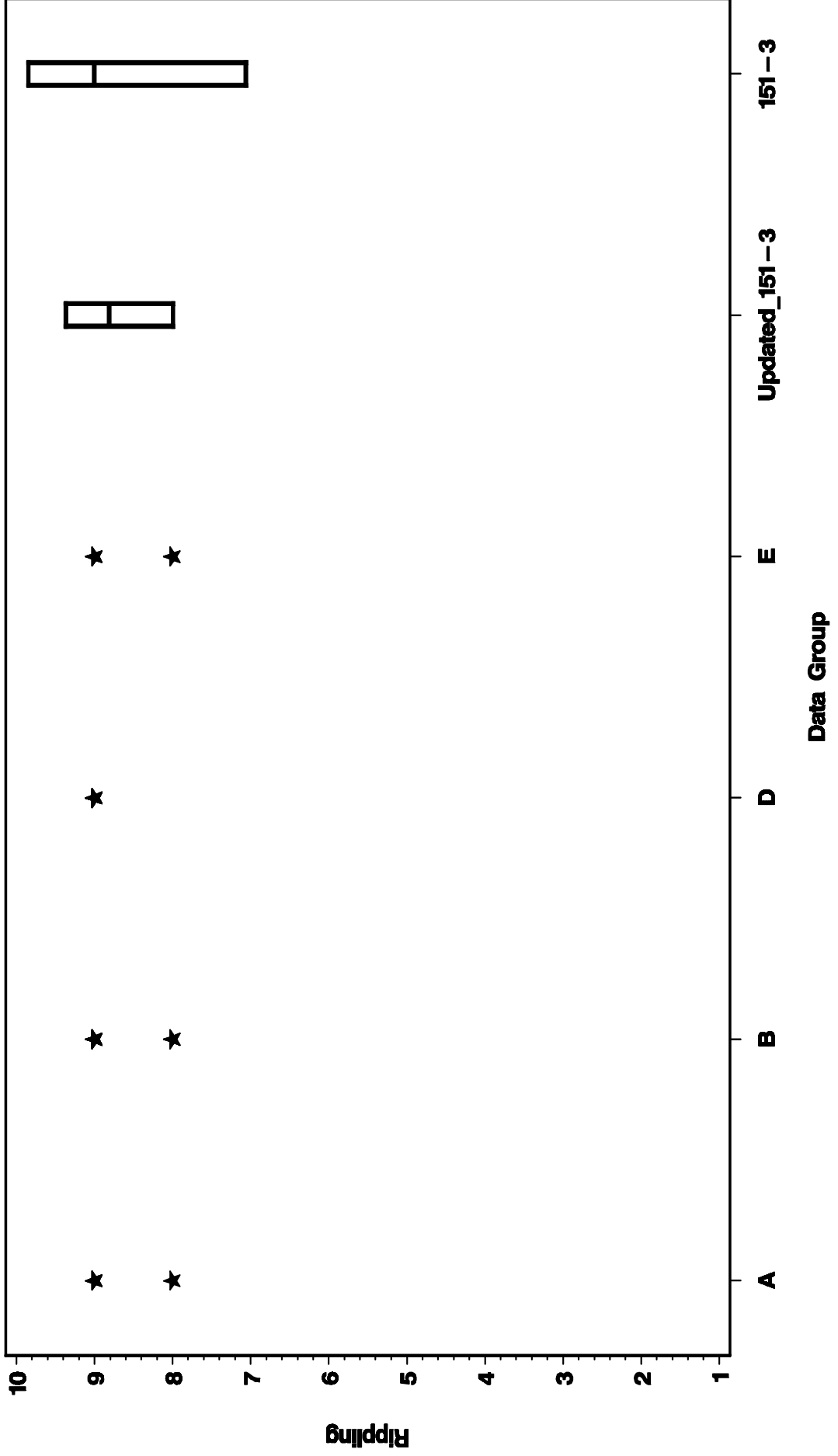
Pinion Ridging



L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 151-3 (Bands Include Merit Ratings of 8 & 9)

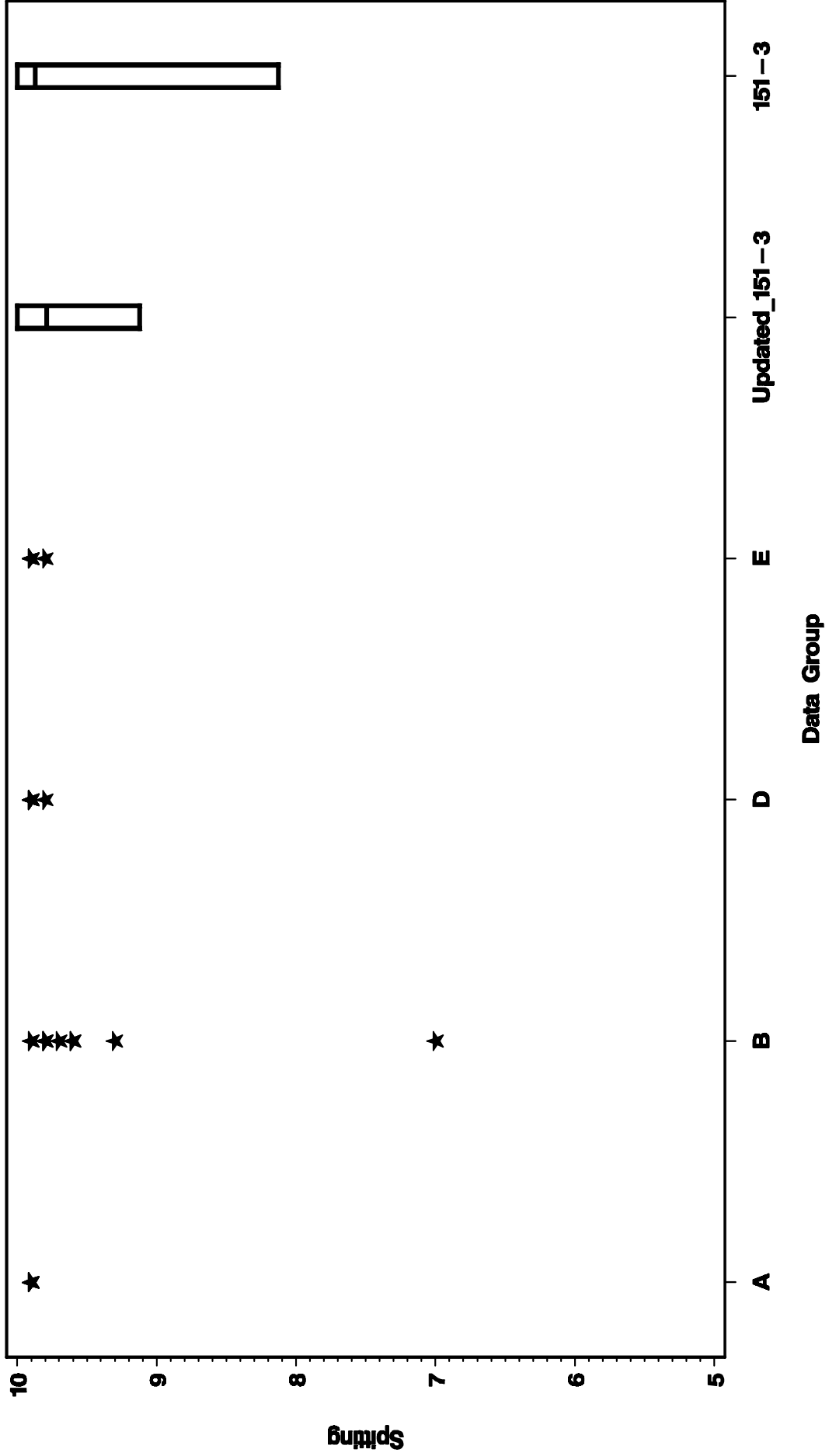
Pinion Rippling



L-37 Lubrified Hardware, Pinion Batch V1L686/P4L626A Updated Test Target Data Set and Shewhart Severity Limits

Reference Oil 151-3 (Bands Include Merit Ratings of 9.3 Thru 10)

Pinion Spitting



CMIR	Lab	Std.	Run	Oil	PINBAT	RINGBAT	DTCOMP	Pwear	Pridg	Pripp	Pspit	Rwear	Rridg	Rripp	Rspit	Ipccrat	fpccrat
35678	D	3	585	128-1	V1L686	P4L626A	20000808	6	6	8	10	9	9	10	10	.	.
38867	D	3	774	128-1	V1L686	P4L626A	20020420	7	7	9	9.7	9	9	10	10	2	0
44312	D	3	885	128-1	V1L686	P4L626A	20021210	7	6	6	9.9	8	9	10	10	2	0
46786	D	3A	31	128-1	V1L686	P4L626A	20031015	6	7	8	9.9	7	9	10	10	2	-1
50333	D	3A	224	128-1	V1L686	P4L626A	20041111	6	5	7	9.8	8	5	8	9.9	3	0
34460	B	191	1405	128-1	V1L686	P4L626A	20000811	7	6	6	9.9	7	8	9	10	.	.
35686	B	191	1525	128-1	V1L686	P4L626A	20011026	6	6	8	9.8	6	7	9	9.9	.	.
39385	B	191	1625	128-1	V1L686	P4L626A	20020521	6	7	8	9.9	5	7	9	9.9	2	-1
44281	B	191	1748	128-1	V1L686	P4L626A	20030123	7	7	9	9.8	8	8	10	9.9	2	-1
46774	B	191	1872	128-1	V1L686	P4L626A	20031012	6	7	8	9.9	6	8	9	9.9	2	-1
50343	B	191	2020	128-1	V1L686	P4L626A	20041020	7	7	9	9.9	8	8	10	9.9	2	-1
50344	B	286	25	128-1	V1L686	P4L626A	20041216	7	7	6	9.8	7	6	9	9.7	2	-1
34212	E	1	594	128-1	V1L686	P4L626A	20000809	5	7	8	9.8	7	8	10	9.9	.	.
35688	E	1	595	128-1	V1L686	P4L626A	20000810	5	7	8	9.9	7	8	10	9.9	.	.
37039	E	1	678	128-1	V1L686	P4L626A	20020117	7	7	8	9.7	7	7	9	9.9	3	-1
46791	E	1	774	128-1	V1L686	P4L626A	20030729	7	6	5	9.9	7	6	9	9.9	3	0
50081	E	1	812	128-1	V1L686	P4L626A	20040517	7	5	6	9.9	7	5	9	9.9	2	-1
35609	A	2	2309	128-1	V1L686	P4L626A	20000811	6	7	5	9.9	7	7	10	9.9	.	.
46803	A	2	2646	128-1	V1L686	P4L626A	20030924	6	6	7	9.9	7	6	10	9.9	2	-1
49556	A	2	2713	128-1	V1L686	P4L626A	20040603	6	7	5	9.9	7	7	9	9.9	3	0
49557	A	2	2757	128-1	V1L686	P4L626A	20041007	5	5	5	8	5	5	10	9.5	2	-1
50350	A	2	2812	128-1	V1L686	P4L626A	20050208	6	5	6	9.9	6	6	9	9.9	3	-1
37238	D	3	572	151-3	V1L686	P4L626A	20000715	7	5	9	9.9	8	6	10	10	.	.
37239	D	3	573	151-3	V1L686	P4L626A	20000716	7	7	9	9.9	8	9	10	10	.	.
39375	D	3	730	151-3	V1L686	P4L626A	20011215	7	5	9	9.8	9	7	9	10	2	0
42482	D	3	831	151-3	V1L686	P4L626A	20020820	7	7	9	9.9	8	9	10	10	3	0
46785	D	3	941	151-3	V1L686	P4L626A	20030514	7	7	9	9.9	9	10	10	10	2	-1
49499	D	3A	32	151-3	V1L686	P4L626A	20031016	7	8	9	9.9	9	10	10	10	3	0
50180	D	3A	164	151-3	V1L686	P4L626A	20040804	7	7	9	9.9	8	9	10	10	2	1
37225	B	191	1403	151-3	V1L686	P4L626A	20000727	7	7	9	9.7	7	7	10	9.9	.	.
37226	B	191	1404	151-3	V1L686	P4L626A	20000728	7	8	9	9.9	7	8	10	9.9	.	.
37940	B	191	1478	151-3	V1L686	P4L626A	20010619	7	6	9	9.8	8	6	9	9.9	.	.
37942	B	191	1579	151-3	V1L686	P4L626A	20020130	6	6	9	9.6	6	7	9	9.9	2	-1
42494	B	191	1676	151-3	V1L686	P4L626A	20020802	6	3	8	7	5	4	9	9.7	2	1
42497	B	191	1680	151-3	V1L686	P4L626A	20020807	6	6	9	9.6	6	5	9	9.9	2	0
46082	B	191	1829	151-3	V1L686	P4L626A	20030625	6	6	8	9.3	6	7	9	9.9	2	-1
49045	B	191	1898	151-3	V1L686	P4L626A	20040211	5	5	9	9.8	6	5	10	9.8	2	-1
49048	B	191	1900	151-3	V1L686	P4L626A	20040214	6	6	8	9.8	6	6	9	9.9	2	-1
51845	B	191	1967	151-3	V1L686	P4L626A	20040722	7	8	9	9.9	7	9	10	10	2	-1
37235	E	1	593	151-3	V1L686	P4L626A	20000808	6	8	9	9.9	7	9	10	9.9	.	.

37581	E	1	637	151-3	V1L686	P4L626A	20010731	6	9	9.9	7	7	9	9.9	.	.
37584	E	1	703	151-3	V1L686	P4L626A	20020517	7	9	9.9	7	6	9	9.9	-1	2
46788	E	1	745	151-3	V1L686	P4L626A	20030319	7	8	9.8	7	6	9	9.9	0	2
49203	E	2	4	151-3	V1L686	P4L626A	20040730	7	8	9.9	7	6	9	9.9	-1	2
37230	A	2	2307	151-3	V1L686	P4L626A	20000808	7	9	9.9	8	6	10	10	.	.
42481	A	2	2613	151-3	V1L686	P4L626A	20030508	7	8	9.9	7	9	9	9.9	-1	3
46800	A	2	2672	151-3	V1L686	P4L626A	20040130	7	9	9.9	8	9	9	9.9	-1	2
49560	A	2	2758	151-3	V1L686	P4L626A	20041013	6	9	9.9	6	9	9	9.9	-1	3