



Test Monitoring Center

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MEMORANDUM: 05-006
DATE: February 8, 2005
TO: L-37 Surveillance Panel
FROM: Donald Lind
SUBJECT: Gear Batch V1L351/P4T771

At the February 3, 2005 L-37 Surveillance Panel Meeting, the panel approved the use of the non-lubricated hardware, gear batch V1L351/P4T771. The approved reference oil targets, plots and data are attached.

These targets are effective for all tests completed on or after February 4, 2005.

DML/dml

Attachments

c: <ftp://ftp.astmtmc.cmu.edu/docs/gear/l37/memos/mem05-006.pdf>

Distribution: Electronic Mail

GEAR BATCH V1L351/P4T771								
REFERENCE OIL 151-3, 152, & 153 PINION TEST TARGETS								
Number of Tests = 8								
	Reference Oil 151-3			Reference Oil 152			Reference Oil 153	
	Mean	Standard Deviation		Mean	Standard Deviation		Mean	Standard Deviation
WEAR	6.88	0.948 (*)		7.50	0.948 (*)		7.00	0.948 (*)
RIDGING	0.007 (9.38)	0.6322 (*)		0.007 (9.38)	0.6322 (*)		-0.706 (8.00)	0.6322 (*)
RIPPLING	-0.469 (8.88)	0.5304 (*)		-0.396 (8.88)	0.5304 (*)		-0.696 (8.00)	0.5304 (*)
SPITTING	0.498 (9.89)	0.1703 (*)		0.534 (9.91)	0.1703 (*)		0.303 (9.74)	0.2700(**)

GEAR BATCH V1L351/P4T771								
REFERENCE OIL 151-3, 152, & 153 RING TEST TARGETS								
Number of Tests = 8								
	Reference Oil 151-3			Reference Oil 152			Reference Oil 153	
	Mean	Standard Deviation		Mean	Standard Deviation		Mean	Standard Deviation
WEAR	7.75	0.741 (*)		7.88	0.741 (*)		7.25	0.741 (*)
RIDGING	0.693 (10.0)	0.4821 (*)		0.693 (10.0)	0.4821 (*)		-0.195 (8.88)	0.4821 (*)
RIPPLING	0.007 (9.38)	0.5355 (*)		-0.131 (9.25)	0.5355 (*)		0.007 (9.38)	0.5355 (*)
SPITTING	0.537 (9.91)	0.1220 (*)		0.579 (9.94)	0.1220 (*)		0.493 (9.88)	0.1220 (*)

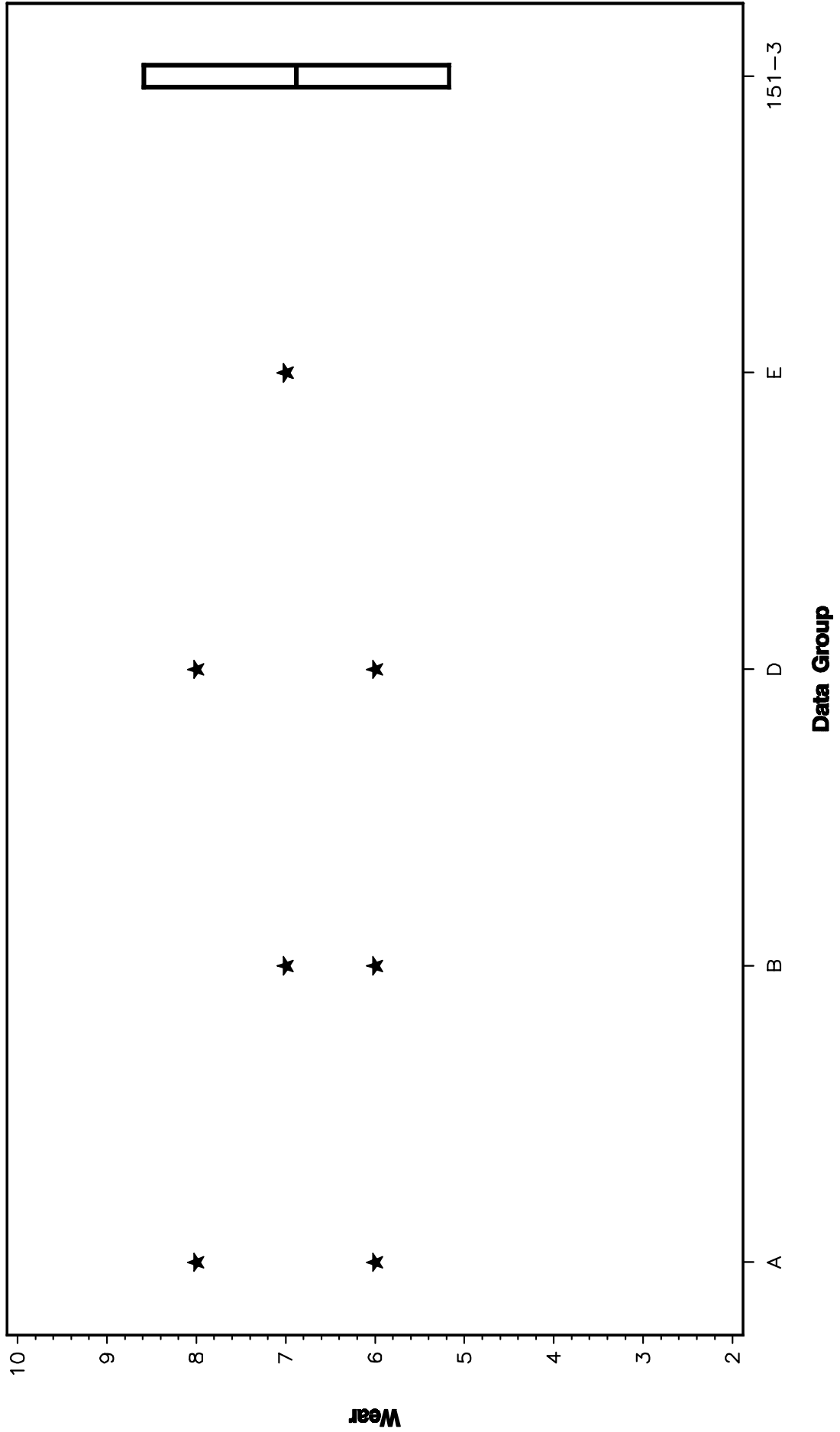
(*) Industry Pooled Standard Deviation

(**) Adjusted Industry Pooled Standard Deviation to Include Spitting Result of 9.3

L-37 Non-lubricated Hardware (Pinion Batch V1L351/P4771)
Reference Oil 151-3

Test Target Data Set and Shewhart Severity Limits

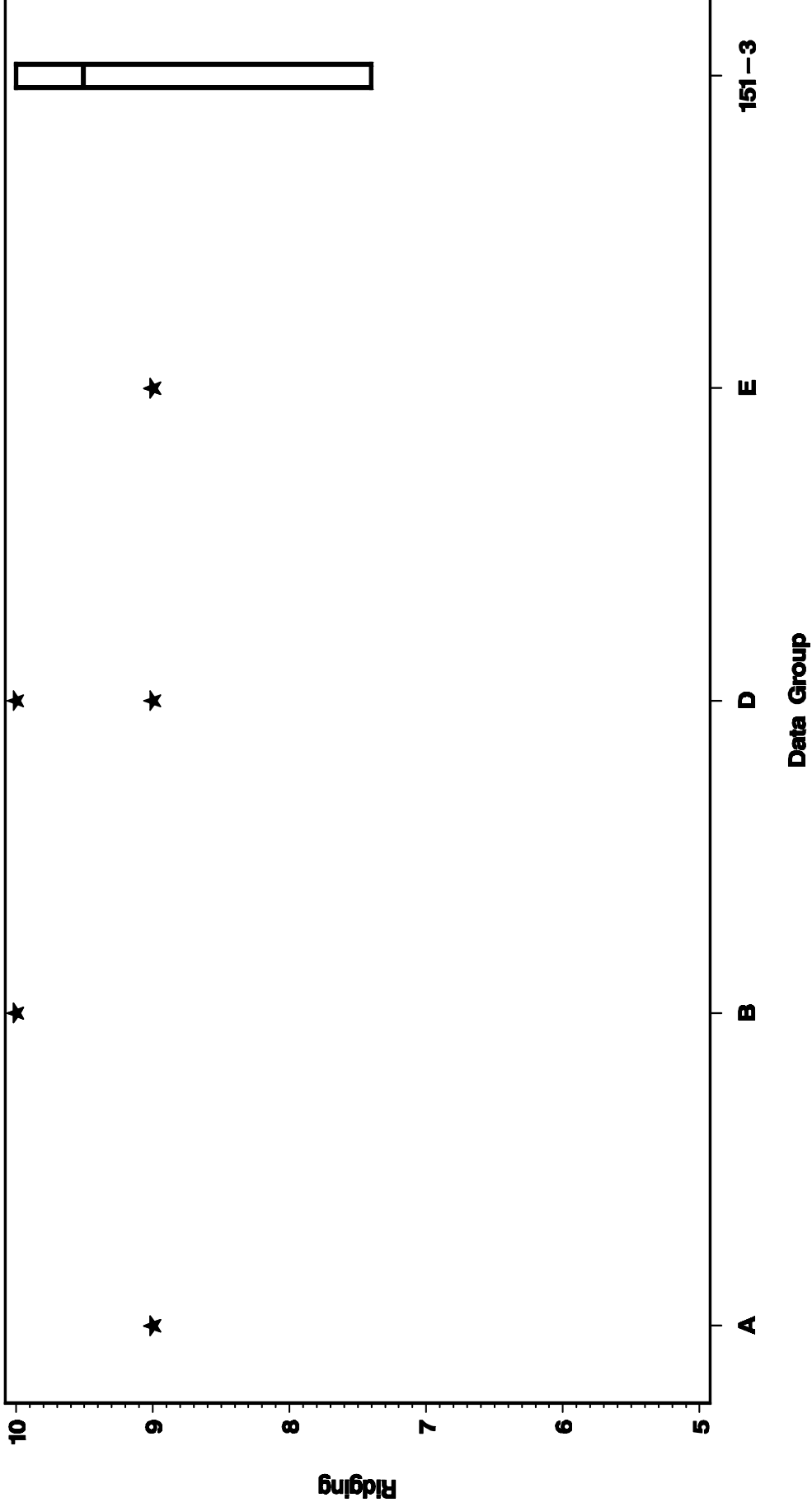
Pinion Wear (Industry Pooled S.D.)



**L-37 Non-lubricated Hardware, Pinion Batch VIL351/P4T771
Reference Oil 151-3**

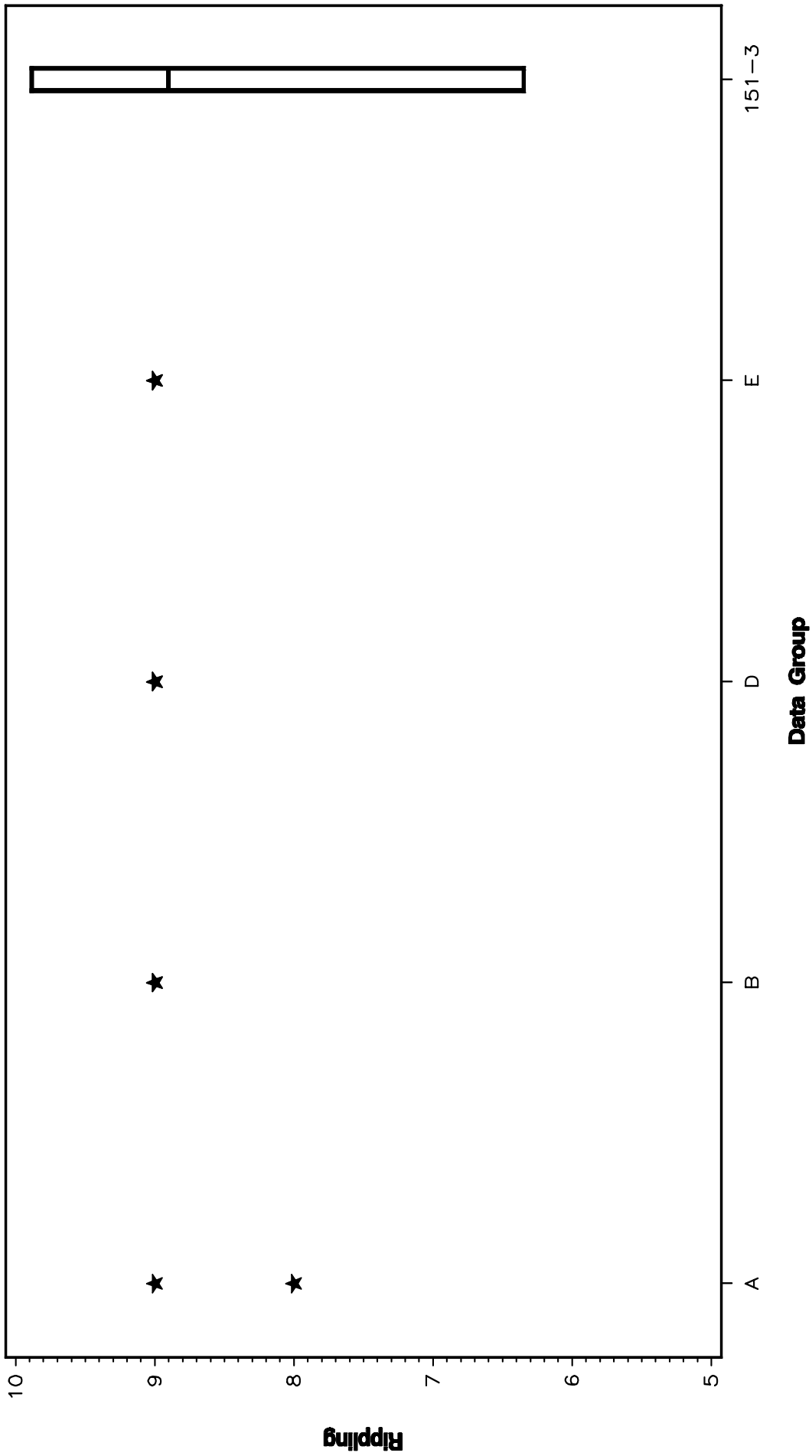
Test Target Data Set and Shewhart Severity Limits

Pinion Ridging, Industry Pooled S.D.



L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 151-3
Test Target Data Set and Shewhart Severity Limits

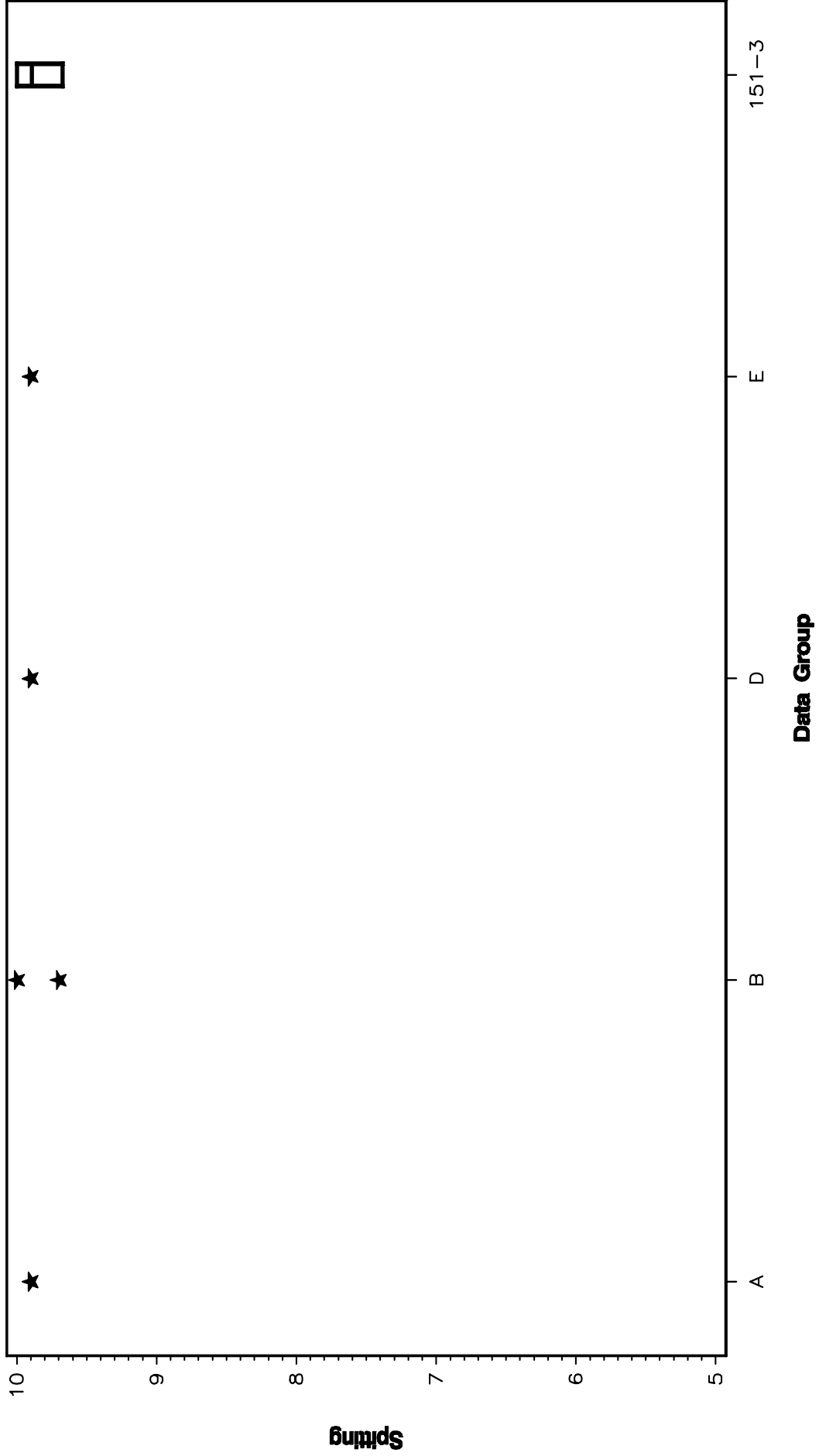
Pinion Rippling, Industry Pooled S.D.



L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 151-3

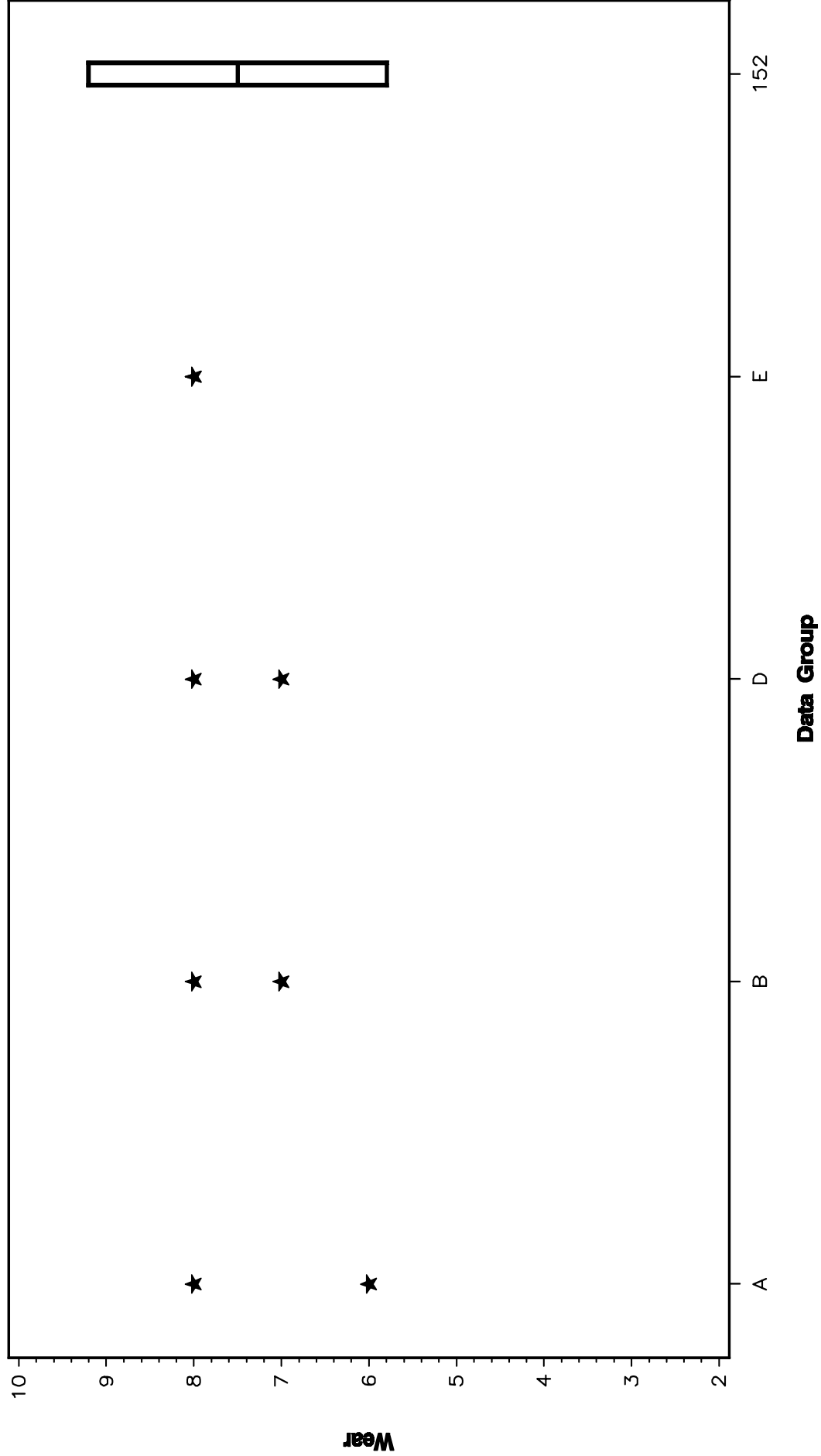
Test Target Data Set and Shewhart Severity Limits

Pinion Spitting, Industry Pooled S.D.



L-37 Non-lubricated Hardware (Pinion Batch V1L351/P4771)
Reference Oil 152
Test Target Data Set and Shewhart Severity Limits

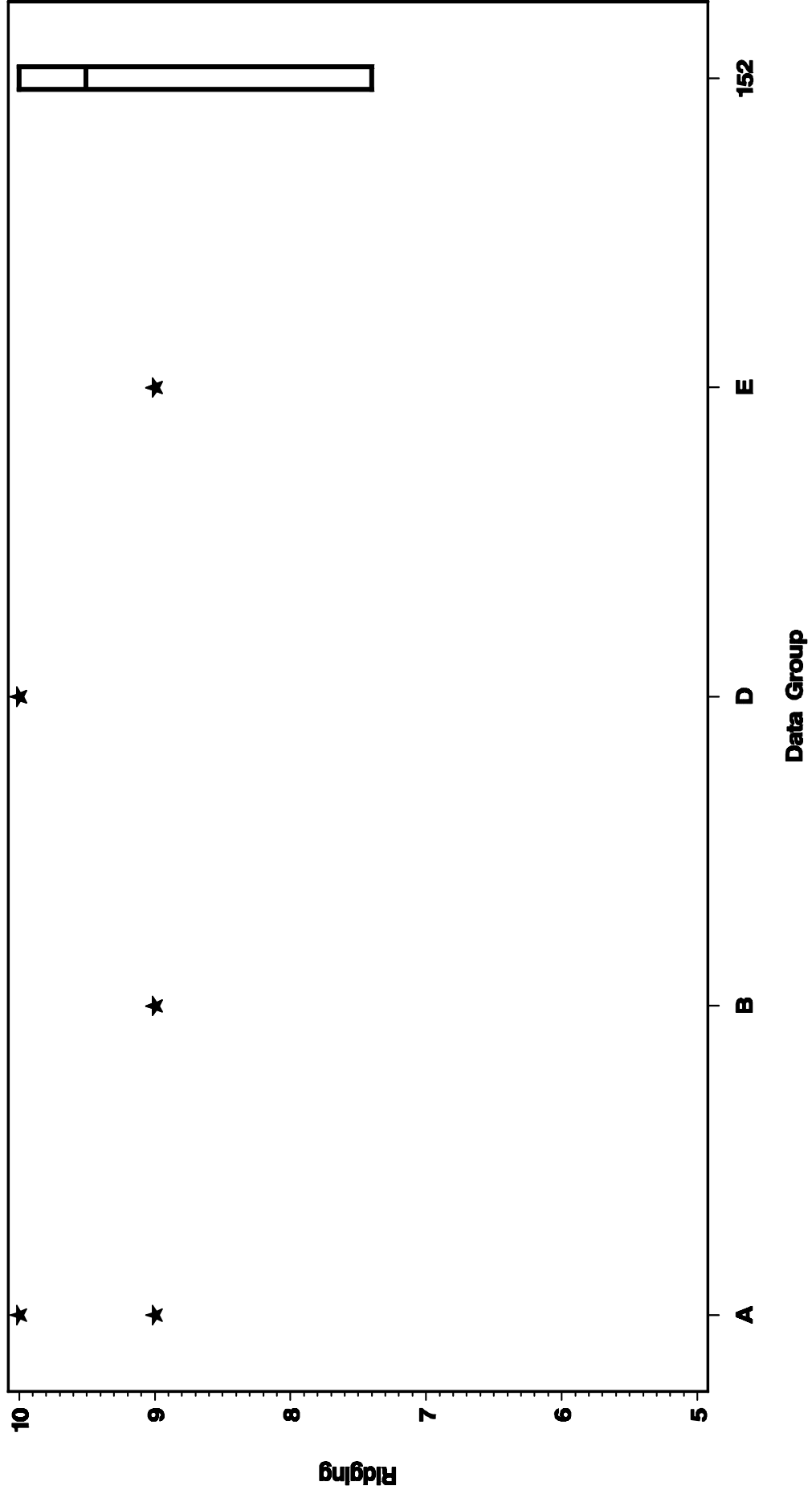
Pinion Wear (Industry Pooled S.D.)



**L--37 Non -- lubrited Hardware, Pinion Batch VIL351/P4T771
Reference Oil 152**

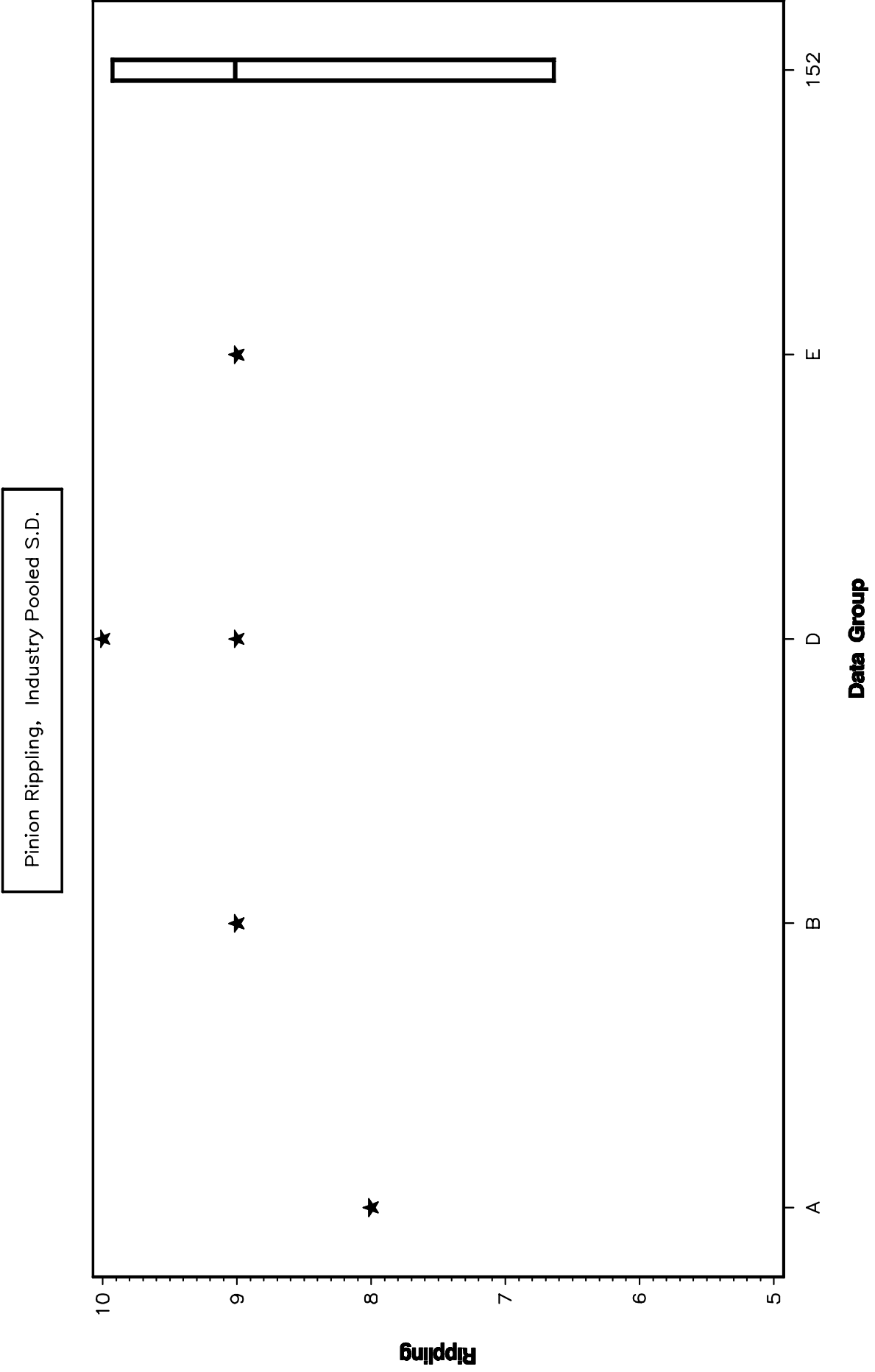
Test Target Data Set and Shewhart Severity Limits

Pinion Rldging, Industry Pooled S.D.



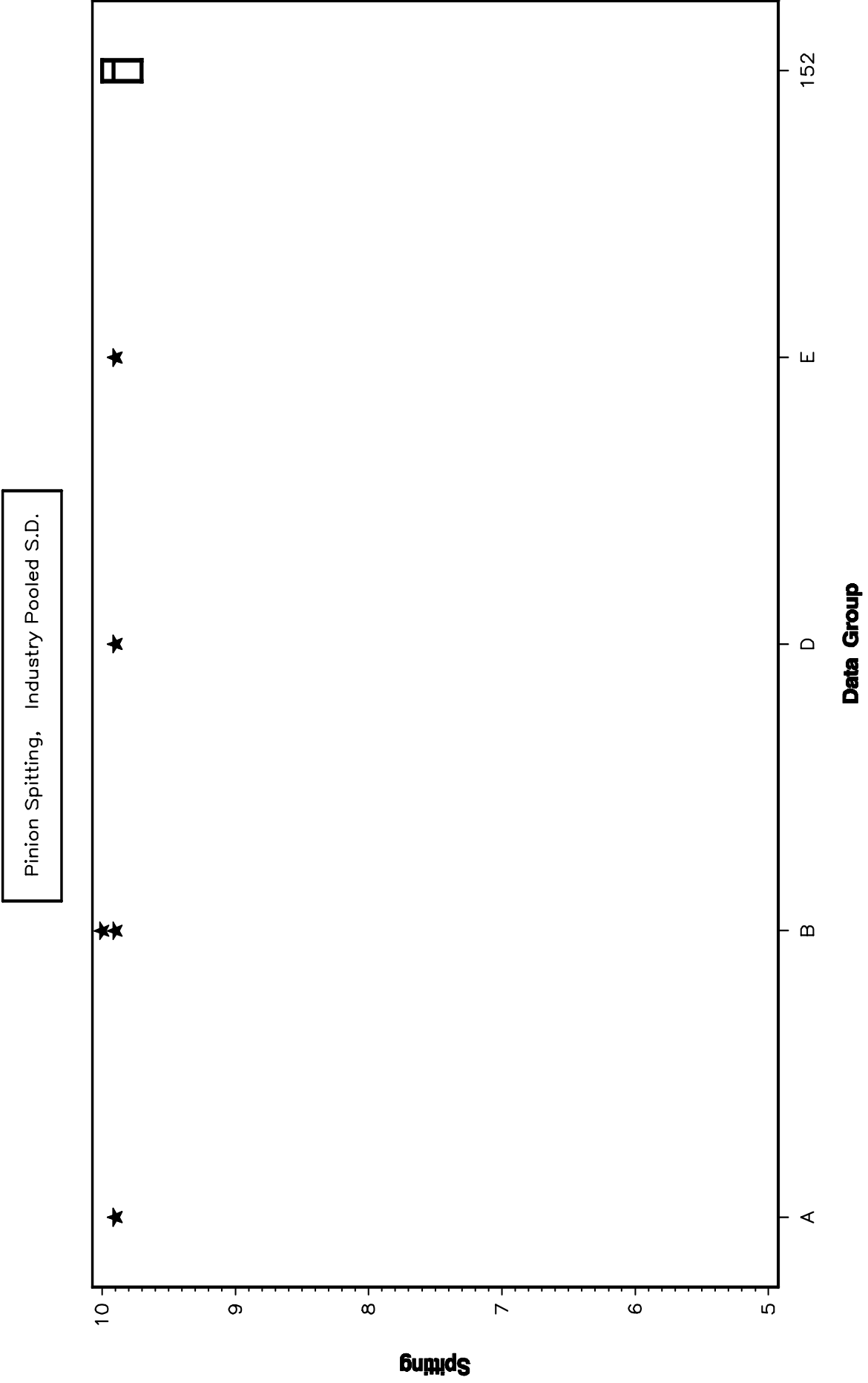
L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 152

Test Target Data Set and Shewhart Severity Limits



L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 152

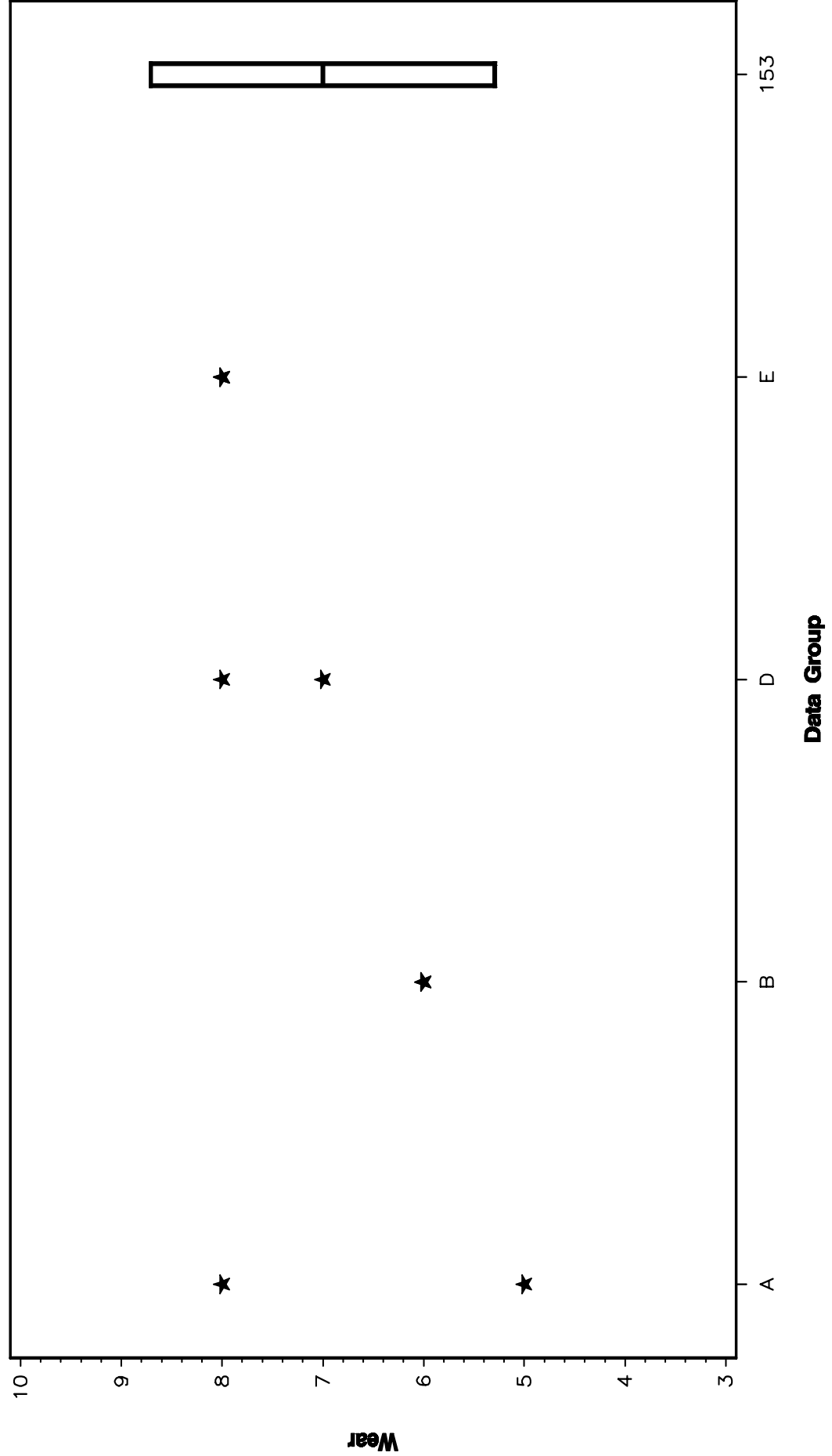
Test Target Data Set and Shewhart Severity Limits



L-37 Non-lubricated Hardware (Pinion Batch V1L351/P4771)
Reference Oil 153

Test Target Data Set and Shewhart Severity Limits

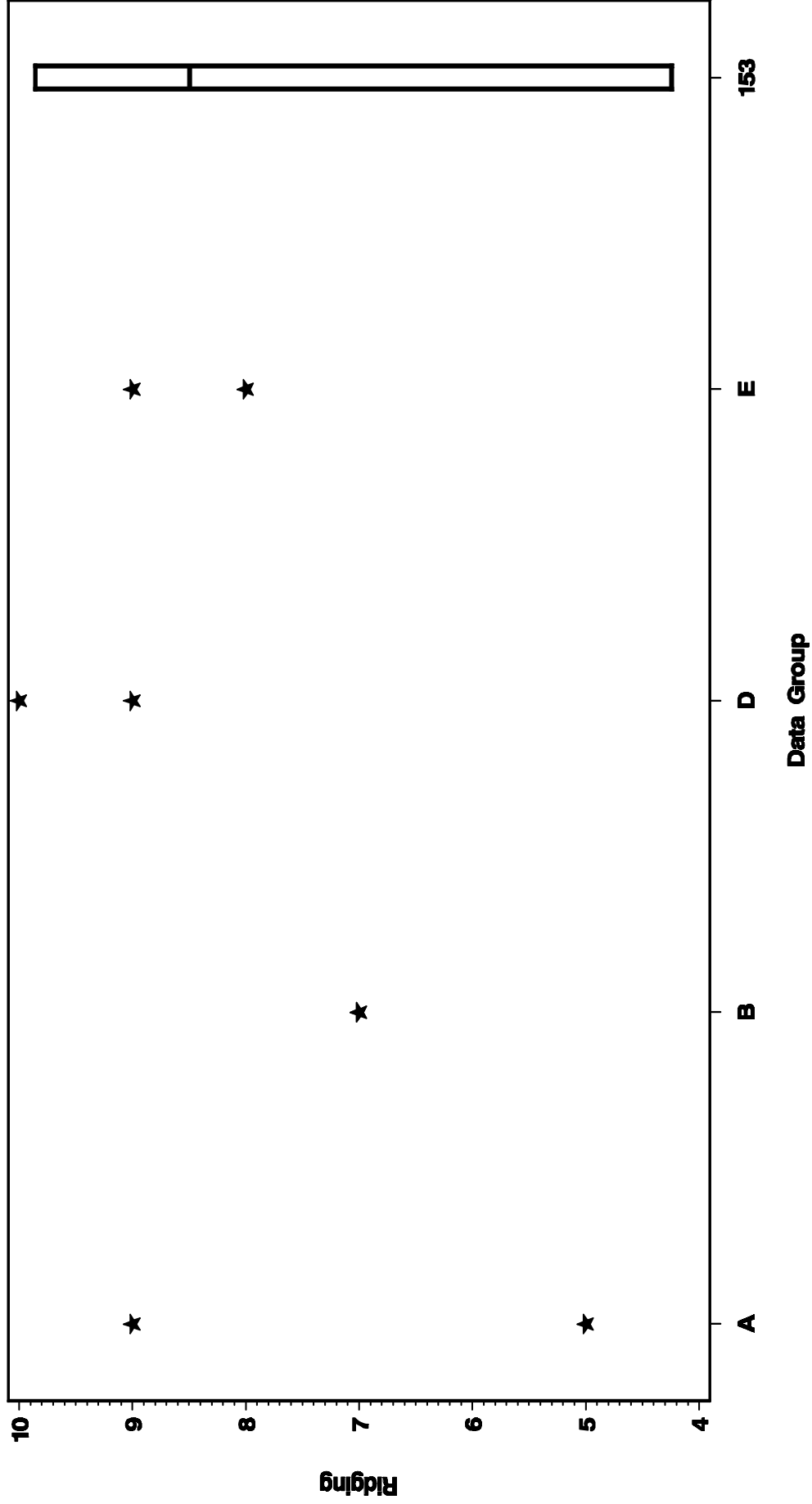
Pinion Wear (Industry Pooled S.D.)



**L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 153**

Test Target Data Set and Shewhart Severity Limits

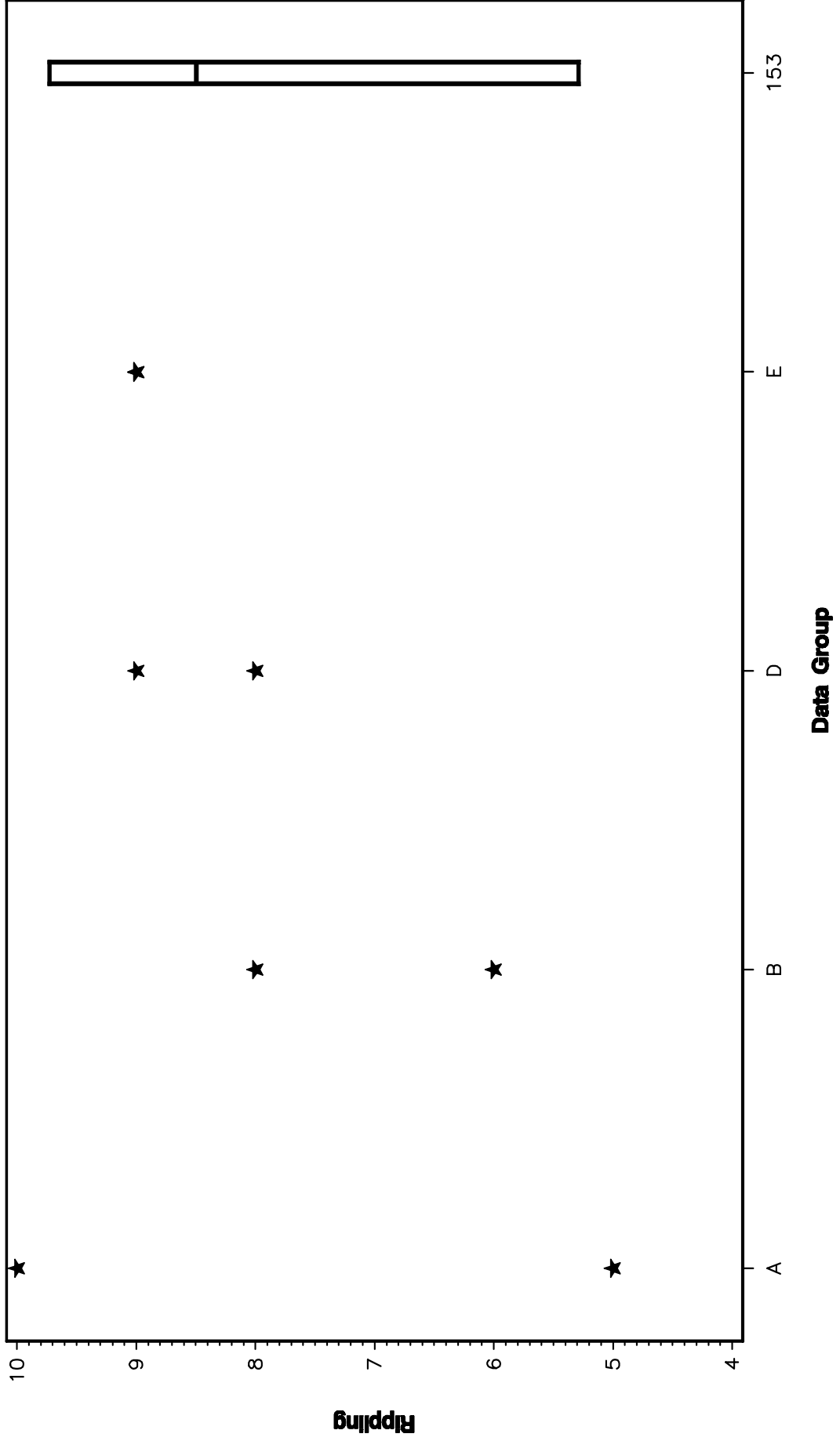
Pinion Ridging, Industry Pooled S.D.



L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 153

Test Target Data Set and Shewhart Severity Limits

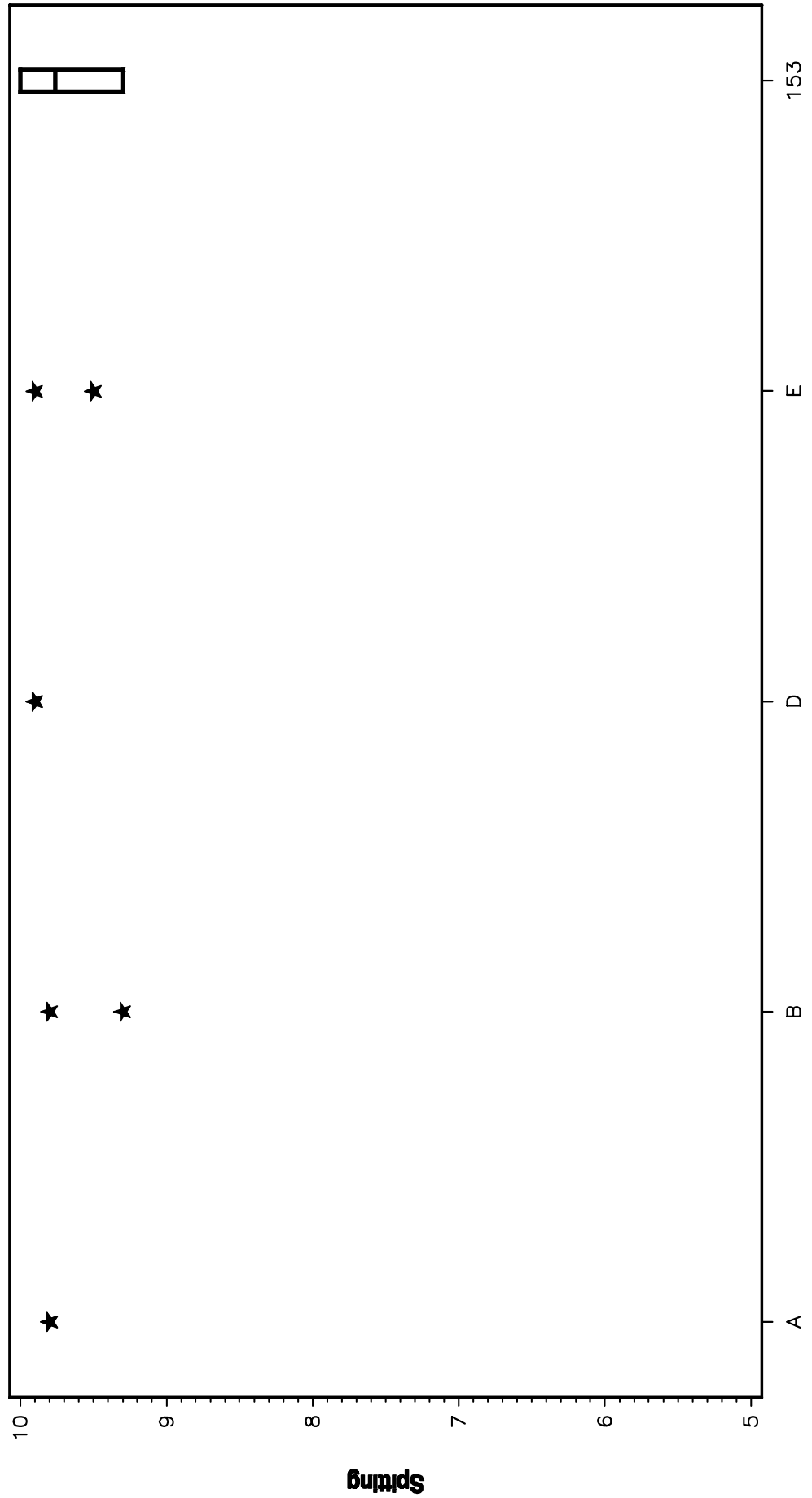
Pinion Rippling, Industry Pooled S.D.



L-37 Non-lubricated Hardware, Pinion Batch V1L351/P4T771
Reference Oil 153

Test Target Data Set and Shewhart Severity Limits

Pinion Spitting, Industry Pooled S.D.



Data Group

Test Key	Lab	Std.	Oil	Pinbat	Ringbat	DTCOMP	Pwear	Pridg	Pripp	Pspit	Rwear	Rridg	Rripp	Rspit
50083	E	2	151-3	V1L351	P4T771	20040924	7	9	9	9.9	7	10	9	9.9
49558	A	2	151-3	V1L351	P4T771	20040929	8	9	8	9.9	8	10	9	9.9
51847	B	191	151-3	V1L351	P4T771	20040930	6	10	9	10	8	10	10	9.8
50181	D	3A	151-3	V1L351	P4T771	20041002	8	9	9	9.9	8	10	10	10
51848	B	191	151-3	V1L351	P4T771	20041009	7	10	9	9.7	8	10	9	9.9
49559	A	2	151-3	V1L351	P4T771	20041022	6	9	9	9.9	7	10	9	9.9
50084	E	2	151-3	V1L351	P4T771	20041105	7	9	9	9.9	7	10	9	9.9
50337	D	3A	151-3	V1L351	P4T771	20041202	6	10	9	9.9	9	10	10	10
52396	B	191	152	V1L351	P4T771	20041010	8	9	9	10	8	10	10	10
52398	B	191	152	V1L351	P4T771	20041015	7	9	9	9.9	8	10	9	9.9
52418	D	3A	152	V1L351	P4T771	20041016	7	10	9	9.9	9	10	9	10
52406	E	2	152	V1L351	P4T771	20041021	8	9	9	9.9	7	10	9	9.9
52489	A	2	152	V1L351	P4T771	20041026	8	9	8	9.9	8	10	9	9.9
52408	E	2	152	V1L351	P4T771	20041102	8	9	9	9.9	7	10	9	9.9
53447	D	3A	152	V1L351	P4T771	20041108	8	10	10	9.9	9	10	10	10
53485	A	2	152	V1L351	P4T771	20041113	6	10	8	9.9	7	10	9	9.9
52402	B	191	153	V1L351	P4T771	20041013	6	7	6	9.3	7	9	9	9.5
53455	B	191	153	V1L351	P4T771	20041026	6	7	8	9.8	7	8	9	9.9
52413	E	2	153	V1L351	P4T771	20041027	8	8	9	9.5	7	9	9	9.9
52391	A	2	153	V1L351	P4T771	20041028	8	9	10	9.8	8	10	10	9.9
53464	E	2	153	V1L351	P4T771	20041104	8	9	9	9.9	7	9	9	9.9
53449	D	3A	153	V1L351	P4T771	20041122	7	10	8	9.9	8	10	10	10
52393	A	2	153	V1L351	P4T771	20041123	5	5	5	9.8	7	6	9	9.9
53535	D	3A	153	V1L351	P4T771	20041206	8	9	9	9.9	7	10	10	10