



Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
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MEMORANDUM: 02-015
DATE: March 18, 2002
TO: L-60-1 Surveillance Panel Members
FROM: Donald Lind
SUBJECT: 148-1 Reference Oil Statistics

On March 8, 2002 the L-60-1 Surveillance Panel approved the use of reference oil 148-1 by letter ballot. The panel also agreed to evaluate 148-1 reference oil tests results using the existing LTMS reference oil 148 test targets. Attached are the 148-1 test data and plots with the 148 Shewhart limits.

All L-60-1 reference oil tests conducted on reference oil 148-1 completing on or after March 11, 2002 shall use these statistics.

DML/dml

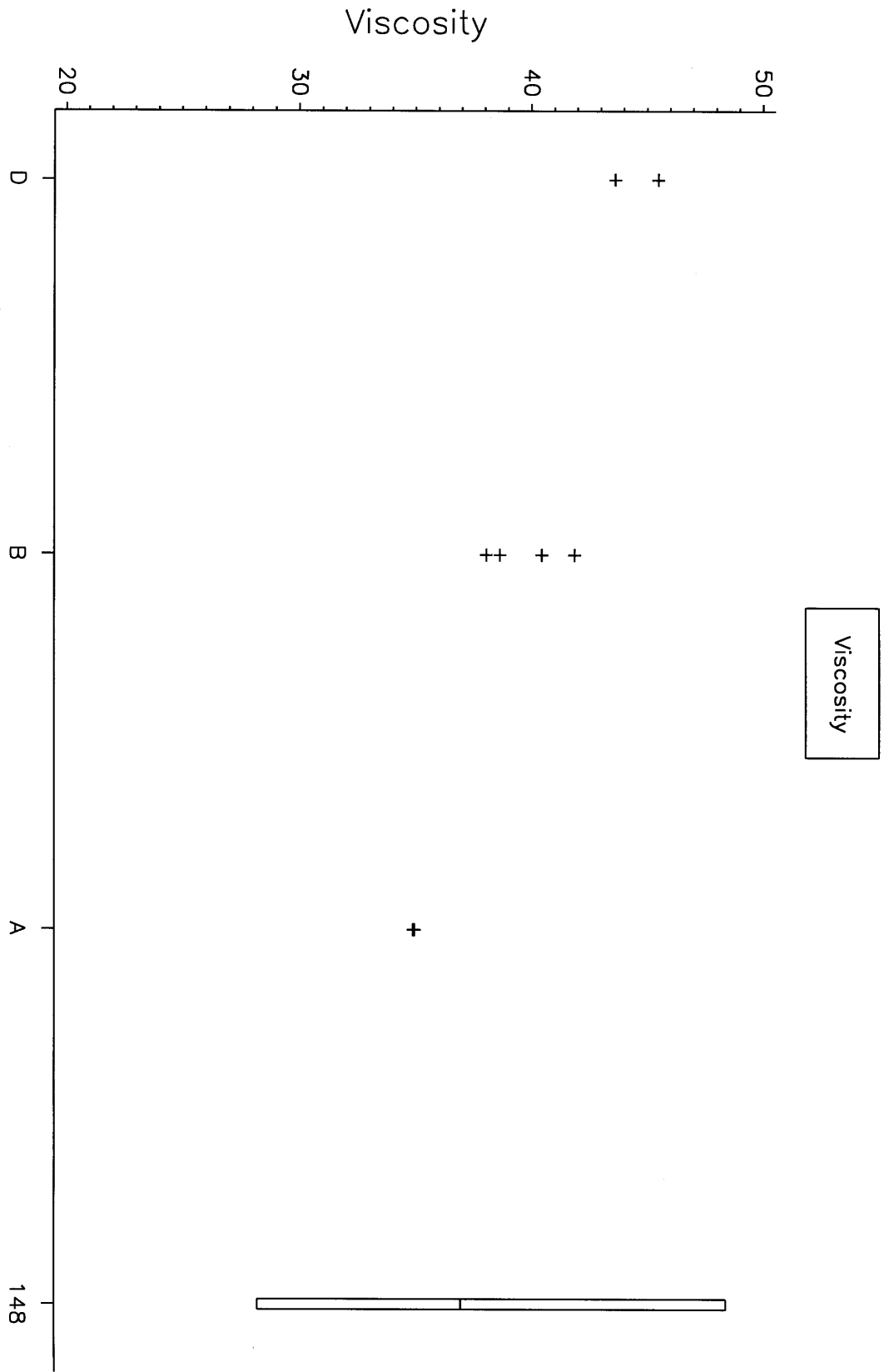
Attachments

c: John Zalar
Frank Farber

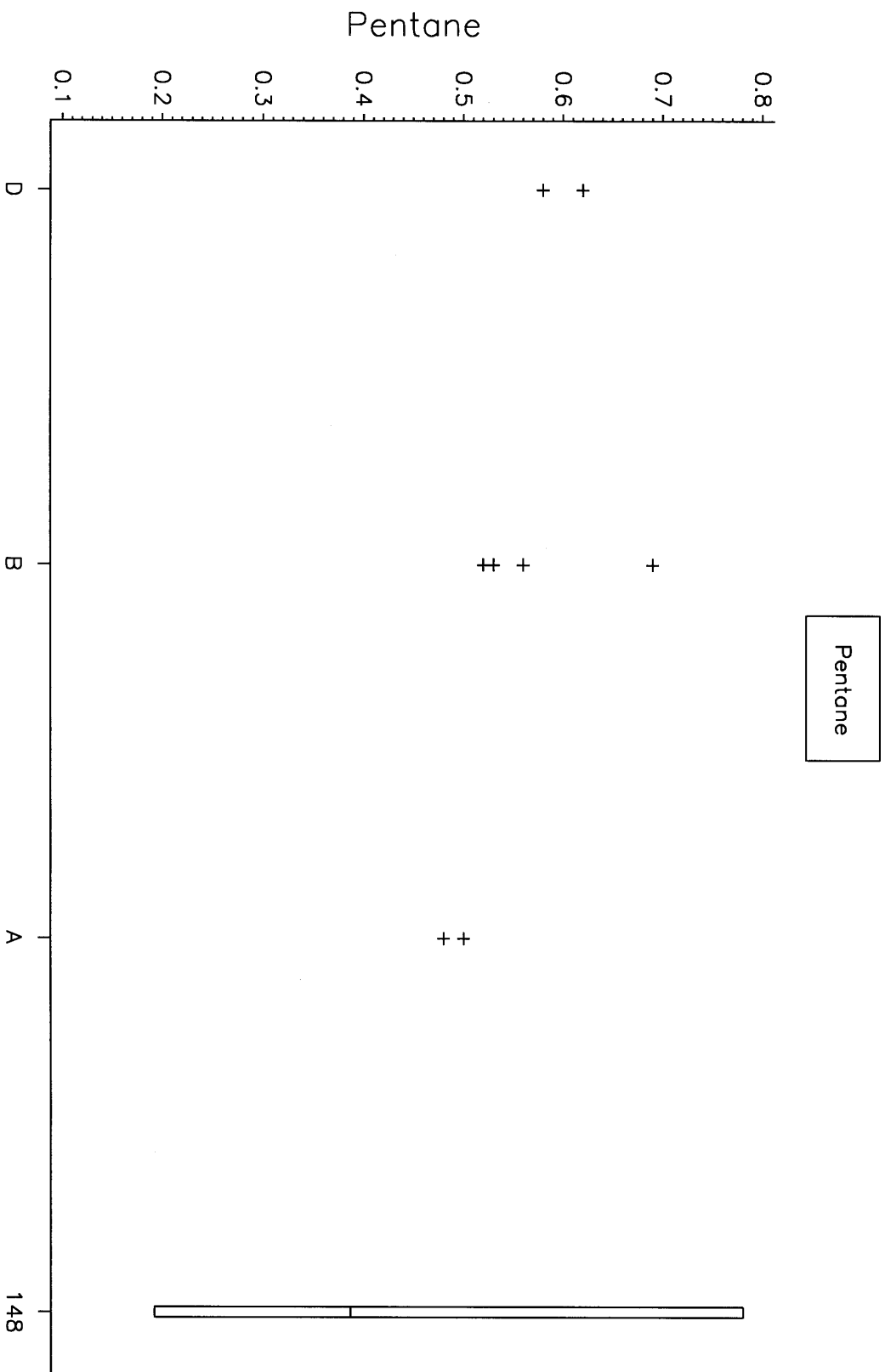
Distribution: Email

<http://www.tmc.astm.cmri.cmu.edu.docs/gears/1601/mem02-015.pdf>

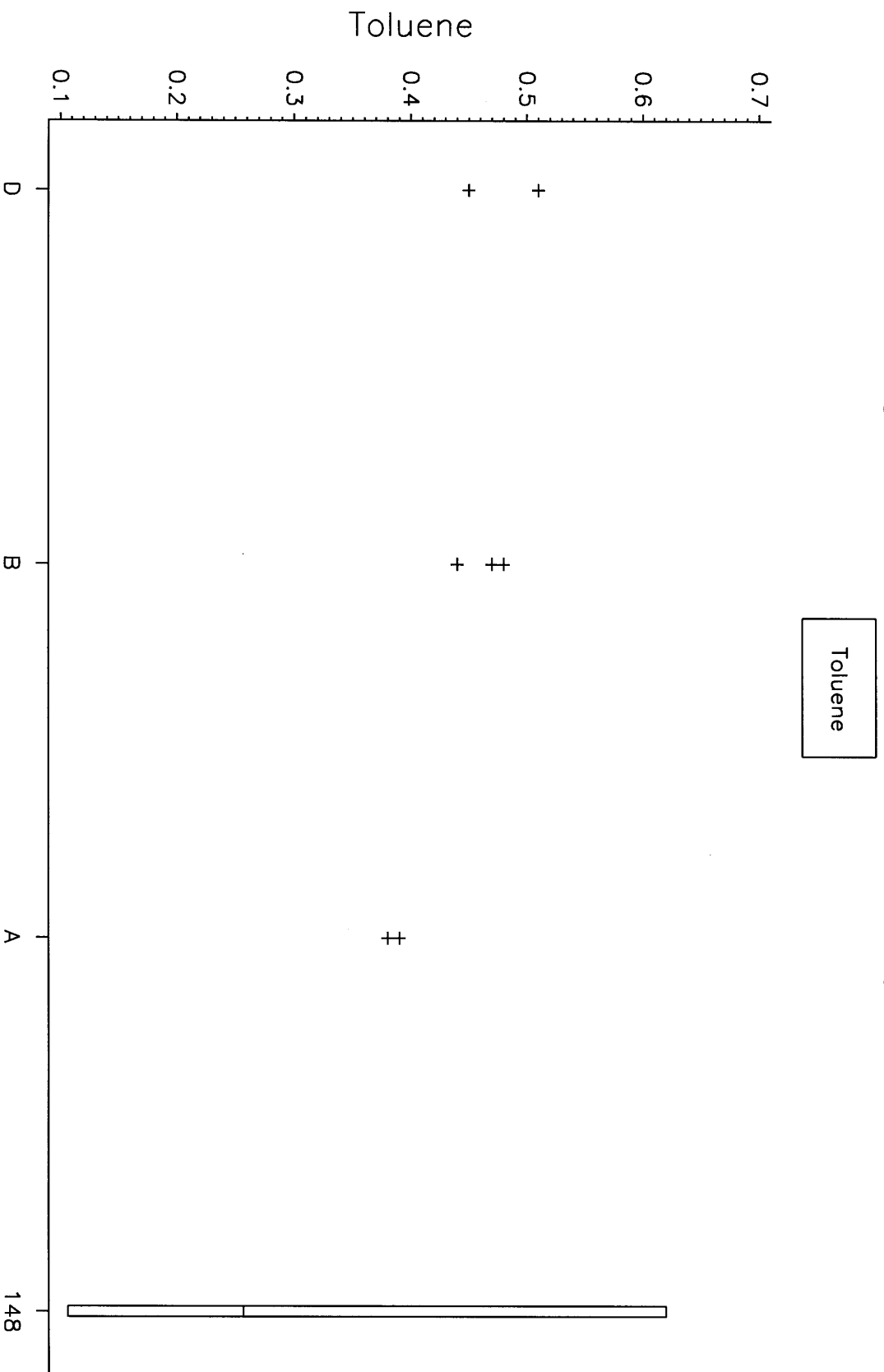
Reference Oil 148-1 Results Compared to Reference Oil 148 Bands
Test Target Data Set and Shewhart Severity Limits



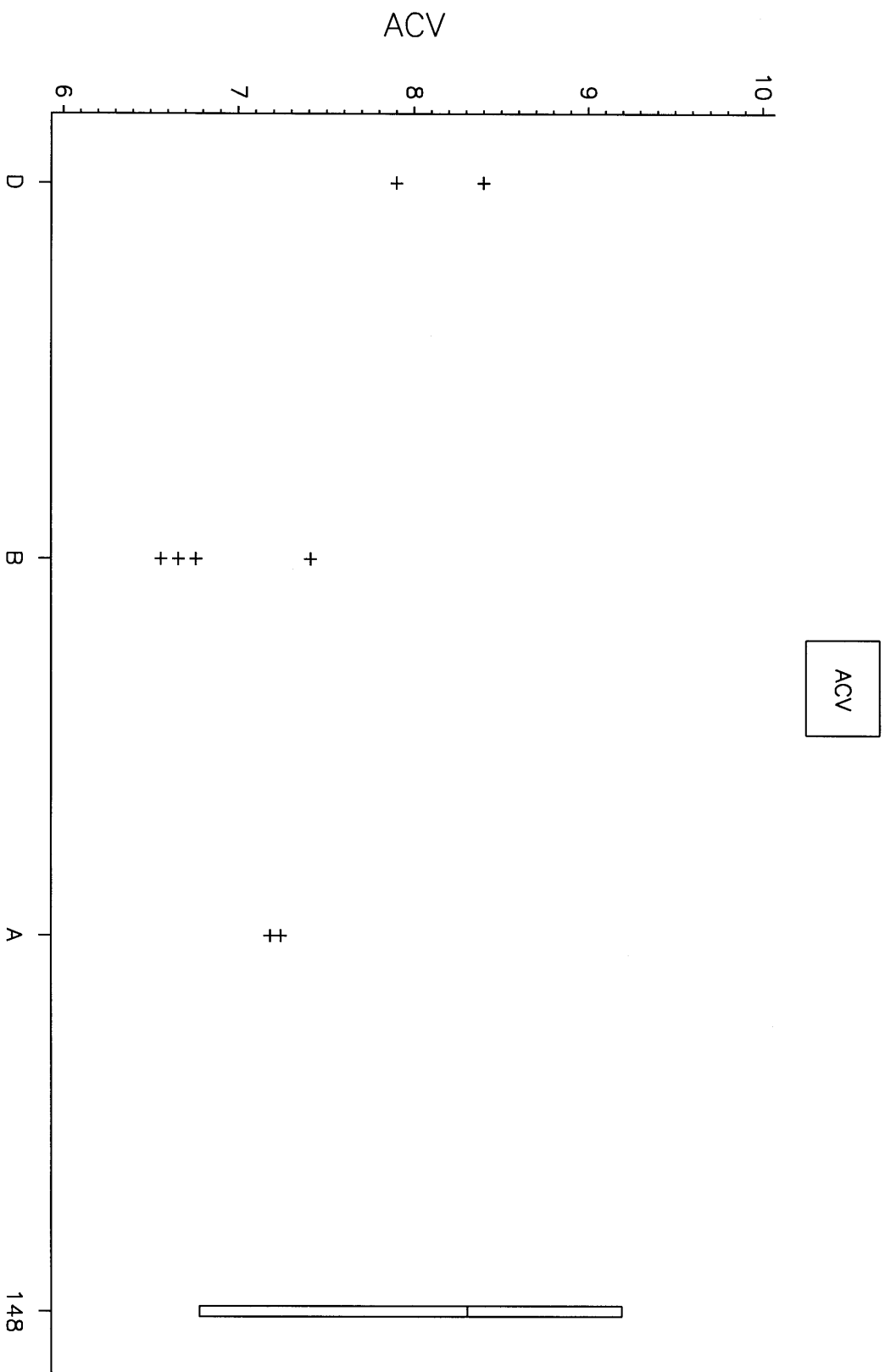
Reference Oil 148-1 Results Compared to Reference Oil 148 Bands
Test Target Data Set and Shewhart Severity Limits



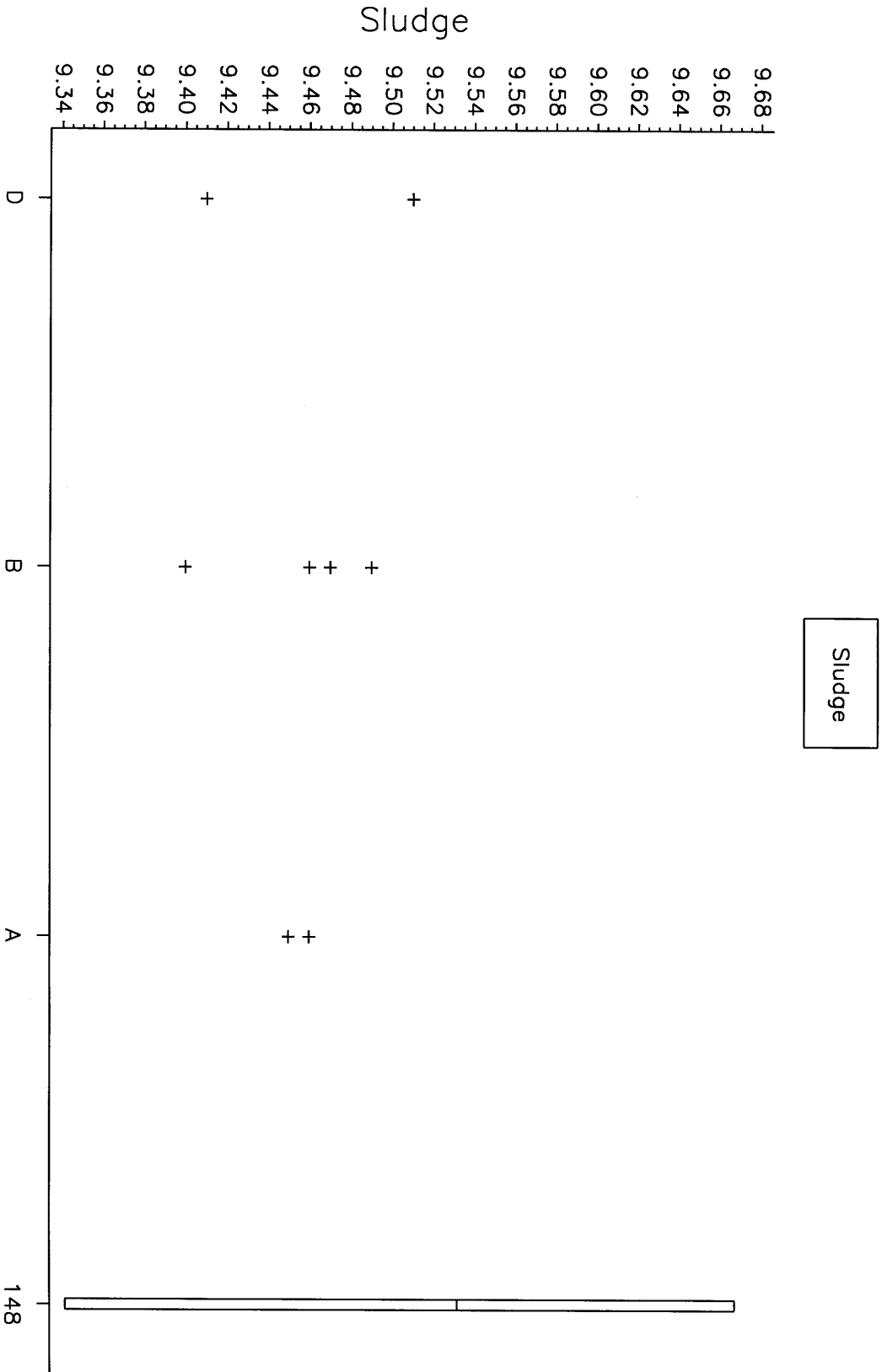
Reference Oil 148-1 Results Compared to Reference Oil 148 Bands
Test Target Data Set and Shewhart Severity Limits



Reference Oil 148-1 Results Compared to Reference Oil 148 Bands
Test Target Data Set and Shewhart Severity Limits



Reference Oil 148-1 Results Compared to Reference Oil 148 Bands
Test Target Data Set and Shewhart Severity Limits



148-1 Test Results

Lab	Stand	Oil	Validity	Date	Vis	Pen	Tol	C.V.	Sludge
D	4A	148-1	AG	20011212	45.49	0.62	0.51	7.9	9.51
A	9	148-1	AG	20011212	34.96	0.48	0.38	7.24	9.45
B	181A	148-1	AG	20011213	38.06	0.52	0.47	7.41	9.46
D	4A	148-1	AG	20011216	43.63	0.58	0.45	8.4	9.41
B	181A	148-1	AG	20011216	41.88	0.56	0.44	6.56	9.4
A	9	148-1	AG	20011219	34.91	0.5	0.39	7.18	9.46
B	183A	148-1	AG	20011220	38.65	0.69	0.48	6.66	9.47
B	183A	148-1	AG	20011228	40.46	0.53	0.44	6.76	9.49

Reference Oil 148-1 Test Targets (Transformed Units)

	Mean	S.D.
Vis	3.61	0.15
Pen	-0.95	0.39
Tol	-1.36	0.49
C.V.	1.59	0.47
Sludge	0.76	0.19