Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #196- 2nd Qtr 2018

About the Rubber Program, About CTS

Key for Web Summary Report

Analysis	Analysis Name
605	Tensile Strength: Precured Rubber Samples
606	Ultimate Elongation: Precured Rubber Samples
607	Stress at 300% Elongation: Precured Samples
608	Stress at 100% Elongation: Precured Samples
620	Hardness (Type A): Precured Rubber Samples
621	Density: Precured Rubber Samples @ 25C
625	Hardness (Shore D/Type D)
630	Tensile Strength: Participant-Cured Rubber
631	Ultimate Elongation: Participant-Cured Samples
632	Tensile Stress at 300% Elongation: Lab-Cured
633	Tensile Stress at 100% Elongation: Lab-Cured
660	Mooney Viscosity (4-minute readings)
661	Mooney Viscosity (8-minute butyl readings)
662	Mooney Stress Relaxation: t80
663	Mooney Stress Relaxation: X30
664	Mooney Stress Relaxation: Area under curve
669	ODR Vulcanization Charac.: Cure Time 10%
670	ODR Vulcanization Charac.: Scorch Time, Ts1
671	ODR Vulcanization Charac.: Cure Time 50%
672	ODR Vulcanization Charac.: Cure Time 90%
673	ODR Vulcanization Charac.: Minimum Torque
674	ODR Vulcanization Charac.: Maximum Torque
684	MDR Vulcanization Charac.: Cure Time 10%
685	MDR Vulcanization Charac.: Scorch Time, Ts1
686	MDR Vulcanization Charac.: Cure Time 50%
687	MDR Vulcanization Charac.: Cure Time 90%
688	MDR Vulcanization Charac.: Minimum Torque
689	MDR Vulcanization Charac.: Maximum Torque
690	RPA Rheological Properties: Part A - G′ at 20Hz
691	RPA Rheological Properties: Part A - G″ at 20Hz
695	RPA Rheological Properties: Part B - G′ at 1.0Hz
696	RPA Rheological Properties: Part B - G″ at 1.0Hz

ABOUT THE PROGRAM

The Collaborative Reference Program for RUBBER, which was initiated in 1969, is operated and maintained by Collaborative Testing Services, Inc. (CTS), with technical guidance provided by the Rubber Division of the American Chemical Society. The program allows laboratories to compare periodically the level and uniformity of their testing with that of other participating laboratories. It also provides a realistic assessment of the state of rubber testing proficiency.

For each test there are summary statistics and a graphical representation of the data. Also shown are notes concerning specific laboratory results, as well as significant findings related to instrument types or other testing variations. Please refer to the section KEY TO TABLES AND GRAPHS for an explanation of terms and guidelines to interpreting the results.

ABOUT CTS

Founded in 1971, CTS is a privately-owned company that specializes in interlaboratory tests for a wide variety of industrial sectors, including rubber, plastics, fasteners and metals, containerboard, paper and color, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 80 countries, currently participate in CTS programs.

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Key for Web Summary Report (Page 1 of 2)

WebCode — Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the Rubber Report published on the CTS Web site. The WebCode for each analysis can be found in the Performance Analysis Report mailed to each participant.

Lab Mean — Tensile & Hardness: the average of the median values obtained for each sample. All other tests: the average of the test results obtained by the participant.

Grand Mean — The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.

Difference from Grand Mean — The difference of the LAB MEAN from the GRAND MEAN.

Between-Lab Standard Deviation — An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).

Comparative Performance Value — An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa). The critical value for each CPV will vary depending on the number of labs participating in a test.

Inst Code — If instruments are tracked in a test, a code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section).

Data Flag — DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

DATA FLAG	STATISTICALLY INCLUDED/EXCLUDED	ACTION REQUIRED
*	INCLUDED	**CAUTION** - review testing procedure and monitor future results. Results fall outside 95% ellipse but within a 99% ellipse that is calculated but not drawn.
X	EXCLUDED	**STOP** - immediate review of data and/or testing procedure is required. Results fall outside the 99% ellipse. See specific notes following each table for more information on why the data is excluded.
M	EXCLUDED	**PROCEED** - lab was unable to report data for at least one sample. However, a lab receiving two of more M flags for a test may need to stop and review its testing procedures.

Graph - For each laboratory, the LAB MEAN for the first sample (x-axis) is plotted against the LAB MEAN for the second sample (y-axis) with each point representing a laboratory. The horizontal and vertical cross-hairs are the GRAND MEANS for each sample. When 20 or more laboratories are in the statistics, an ellipse is also drawn so that 95% of the time a randomly selected laboratory will be included inside the ellipse. Plotted data flags are explained above.

Common Problems Highlighted in Footnotes

1. ***Extreme data*** - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. (The data usually vary by more than three standard deviations from the grand mean.) The participant is advised to immediately review his data and/or testing procedure.

2. ***Systematic bias*** - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.

3. ***Inconsistency in testing between samples/sample sets*** - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an * that falls on the edge of the ellipse.

4. ***Inconsistency in testing within a sample*** - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.

5. ***Data appeared to be off by a factor of # and was corrected by CTS*** - In tests that involve computations, the results reported to CTS may be off by a factor. If this factor can easily be determined, CTS may correct the data and flag the participant. Occasionally CTS will correct a laboratory's results even though the data are still high or low when compared to the other participants. This is done so that the laboratory may be alerted to other possible errors in its testing procedure.

6. ***Data for two samples (or two tests) appeared to be switched by the lab, and the error was corrected by CTS.***

Labs flagged with an * are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An * should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.

WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
27WPVQ		3,577.2	146.9	0.88	3,648.6	204.0	1.17
29YTKR		3,314.1	-116.2	-0.70	3,372.2	-72.3	-0.42
2PUFHQ		3,180.8	-249.6	-1.50	3,240.4	-204.1	-1.17
3ATXER		3,515.0	84.7	0.51	3,531.0	86.5	0.50
3E8BJK		3,739.5	309.2	1.86	3,716.5	272.0	1.57
3ND7LQ		3,410.5	-19.8	-0.12	3,479.5	35.0	0.20
3W27UM		3,536.5	106.2	0.64	3,594.0	149.5	0.86
47J6ZJ		3,445.0	14.7	0.09	3,425.0	-19.5	-0.11
4DE8R4		3,505.4	75.1	0.45	3,643.5	199.0	1.15
4JXV9M		3,564.3	134.0	0.80	3,567.2	122.7	0.71
626RVP		3,272.0	-158.3	-0.95	3,247.0	-197.5	-1.14
63N3ZV		3,257.6	-172.8	-1.04	3,372.9	-71.6	-0.41
772QTL		3,629.2	198.9	1.19	3,630.3	185.8	1.07
7G7FQV	*	3,560.7	130.4	0.78	3,299.6	-144.9	-0.83
7KDEVN		3,466.3	35.9	0.22	3,480.3	35.7	0.21
83T8YH		3,484.0	53.7	0.32	3,645.5	201.0	1.16
8AFT84		3,447.5	17.2	0.10	3,526.0	81.5	0.47
8UM3B8		3,504.0	73.7	0.44	3,560.3	115.8	0.67
8XY7X4	*	3,312.9	-117.4	-0.70	3,553.5	109.0	0.63
8YF6DL		3,321.4	-108.9	-0.65	3,393.9	-50.6	-0.29
8YTW4H		3,337.3	-93.0	-0.56	3,385.2	-59.3	-0.34
9ENFHK		3,551.5	121.2	0.73	3,438.1	-6.5	-0.04
9F48X2		3,236.5	-193.8	-1.16	3,349.5	-95.0	-0.55
9XDWLE		3,211.5	-218.8	-1.31	3,189.0	-255.5	-1.47
ACV292		3,492.9	62.6	0.38	3,599.3	154.8	0.89
AFXCQ2		3,613.6	183.3	1.10	3,694.4	249.9	1.44
B2UUBF		3,239.4	-190.9	-1.15	3,220.6	-223.9	-1.29
B3MRG2		3,251.8	-178.6	-1.07	3,290.9	-153.6	-0.88
BA8JUR		3,463.5	33.2	0.20	3,508.5	64.0	0.37
BBW9WE		3,516.2	85.9	0.52	3,569.3	124.8	0.72
BFCJAH	X	2,715.9	-714.5	-4.29	2,784.7	-659.8	-3.80
BHMXYH		3,145.9	-284.4	-1.71	3,180.7	-263.8	-1.52
BR94U2		3,469.0	38.7	0.23	3,435.0	-9.5	-0.05
C4FAKT		3,624.5	194.2	1.17	3,665.9	221.4	1.27
C98AA4		3,617.5	187.2	1.12	3,573.0	128.5	0.74
CK3FCE		3,308.0	-122.3	-0.73	3,325.5	-119.0	-0.68
DDTLMB		3,553.5	123.1	0.74	3,560.7	116.2	0.67
DJJYLD		3,487.2	56.8	0.34	3,447.4	2.9	0.02

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
DNU68C		3,589.0	158.7	0.95	3,498.5	54.0	0.31
DT9FLF		3,230.0	-200.3	-1.20	3,253.0	-191.5	-1.10
DYX6YX		3,464.8	34.4	0.21	3,534.4	89.9	0.52
E9DBA8		3,532.4	102.1	0.61	3,456.7	12.2	0.07
EJZY9L		3,354.8	-75.6	-0.45	3,297.5	-147.0	-0.85
ETMLXB		3,233.0	-197.3	-1.18	3,289.5	-155.0	-0.89
F8PQ8E	*	3,406.5	-23.8	-0.14	3,691.4	246.9	1.42
FCWR3C		3,641.0	210.7	1.26	3,683.0	238.5	1.37
G8JW2D		3,472.0	41.7	0.25	3,476.0	31.5	0.18
HAJWB6		3,288.0	-142.3	-0.85	3,259.0	-185.5	-1.07
HJTV9Q		3,289.9	-140.4	-0.84	3,233.4	-211.1	-1.21
J6YH4A	X	2,638.0	-792.3	-4.76	2,589.0	-855.5	-4.92
J96U2B		3,589.5	159.2	0.96	3,563.0	118.5	0.68
JRV4Y7		3,252.0	-178.3	-1.07	3,234.5	-210.0	-1.21
JZR2NU		3,563.5	133.2	0.80	3,412.5	-32.0	-0.18
K4N3A9		3,692.0	261.7	1.57	3,692.5	248.0	1.43
K8BT3J		3,333.0	-97.3	-0.58	3,319.0	-125.5	-0.72
K9W94U		3,234.5	-195.8	-1.18	3,237.0	-207.5	-1.19
KL72F7		3,759.5	329.2	1.98	3,812.5	368.0	2.12
KWQJFB		3,520.8	90.5	0.54	3,601.3	156.8	0.90
L2ECK6	*	2,981.2	-449.1	-2.70	2,973.9	-470.6	-2.71
L2J9AN		3,374.5	-55.8	-0.34	3,333.0	-111.5	-0.64
LEW7P3		3,211.2	-219.2	-1.32	3,201.0	-243.5	-1.40
LUHQYH		3,490.4	60.0	0.36	3,527.3	82.8	0.48
LWAPDF		3,611.5	181.1	1.09	3,618.7	174.2	1.00
M6CZTY		3,511.0	80.7	0.48	3,593.5	149.0	0.86
MKBBQN	X	3,267.0	-163.3	-0.98	2,991.0	-453.5	-2.61
MKRM79		3,655.0	224.7	1.35	3,594.1	149.6	0.86
N2MAJ7		3,612.9	182.6	1.10	3,683.3	238.8	1.37
NJ79P4		3,170.0	-260.3	-1.56	3,090.5	-354.0	-2.04
NP263F		3,402.0	-28.3	-0.17	3,486.5	42.0	0.24
NQT4GE		3,437.0	6.7	0.04	3,434.5	-10.0	-0.06
NWQL3Y		3,162.6	-267.8	-1.61	3,250.3	-194.2	-1.12
NY4NF4		3,436.0	5.6	0.03	3,574.5	130.0	0.75
P28HWL		3,145.5	-284.8	-1.71	3,327.0	-117.5	-0.68
P8DEGL		3,385.0	-45.3	-0.27	3,371.0	-73.5	-0.42
P9LUNM	X	3,691.2	260.9	1.57	3,277.9	-166.6	-0.96

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
PBEFJ4		3,211.9	-218.5	-1.31	3,129.9	-314.6	-1.81
PLUAWH		3,344.6	-85.7	-0.51	3,249.6	-194.9	-1.12
PW8Y73		3,393.4	-36.9	-0.22	3,401.0	-43.5	-0.25
Q7AUNX		3,540.5	110.2	0.66	3,575.0	130.5	0.75
QPPFQE		3,568.0	137.6	0.83	3,615.1	170.6	0.98
QXLDF3		3,416.1	-14.2	-0.09	3,352.4	-92.1	-0.53
R3VTKK		3,341.0	-89.3	-0.54	3,259.0	-185.5	-1.07
TFZ97F	X	4,372.6	942.3	5.66	4,511.5	1,067.0	6.14
TYMN6W		3,633.9	203.6	1.22	3,607.8	163.3	0.94
U2M47R		3,686.0	255.7	1.53	3,628.5	184.0	1.06
U6B6E7	*	3,265.0	-165.3	-0.99	3,075.0	-369.5	-2.13
UHUB6U		3,095.9	-334.5	-2.01	3,141.5	-303.0	-1.74
UMALJY		3,567.0	136.7	0.82	3,655.0	210.5	1.21
UP94CJ		3,482.5	52.2	0.31	3,432.0	-12.5	-0.07
UW9Q2Y		3,540.5	110.2	0.66	3,506.7	62.1	0.36
VBLGFQ		3,467.1	36.8	0.22	3,489.0	44.5	0.26
VKZXHY		3,631.0	200.7	1.20	3,524.5	80.0	0.46
VMQTZ7		3,543.0	112.7	0.68	3,490.5	46.0	0.26
W43D9N		3,641.1	210.8	1.27	3,646.4	201.9	1.16
W9CTFR	*	3,217.5	-212.8	-1.28	3,495.0	50.5	0.29
WPN8XP		3,166.0	-264.3	-1.59	3,290.0	-154.5	-0.89
WVVQ4V		3,314.0	-116.3	-0.70	3,450.5	6.0	0.03
WYNZ4V		3,703.0	272.6	1.64	3,666.5	222.0	1.28
X6WH3N		3,503.6	73.2	0.44	3,444.1	-0.4	0.00
XN8DUU		3,634.5	204.2	1.23	3,653.5	209.0	1.20
Y7JJJV		3,372.5	-57.8	-0.35	3,177.5	-267.0	-1.54
Z2497R		3,593.5	163.2	0.98	3,525.5	81.0	0.47
Z2UQB8		3,452.5	22.2	0.13	3,392.5	-52.0	-0.30
Z3HVGE		3,393.3	-37.1	-0.22	3,522.9	78.4	0.45
ZWCYXE		3,105.5	-324.8	-1.95	3,154.5	-290.0	-1.67
ZYLGHB		3,443.5	13.2	0.08	3,379.5	-65.0	-0.37

Summary Statistics

	Sample B81-B82	Sample B83-B84
Grand Means	3,430.33 psi	3,444.50 psi
Stnd Dev Btwn Labs	166.58 psi	173.76 psi

Statistics based on 101 of 106 reporting participants

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Summary Statistics in SI Units		
Grand Means	23.651 MPa	23.75 MPa
Stnd Dev Btwn Labs	1.149 MPa	1.20 MPa

Statistics based on 101 of 106 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #605

BFCJAH (X) - Data for all samples are low. Possible Systematic Error.

J6YH4A (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B81-B82.

MKBBQN (X) - Inconsistent in testing between samples.

P9LUNM (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B83-B84.

TFZ97F (X) - Data for all samples are high. Possible Systematic Error.

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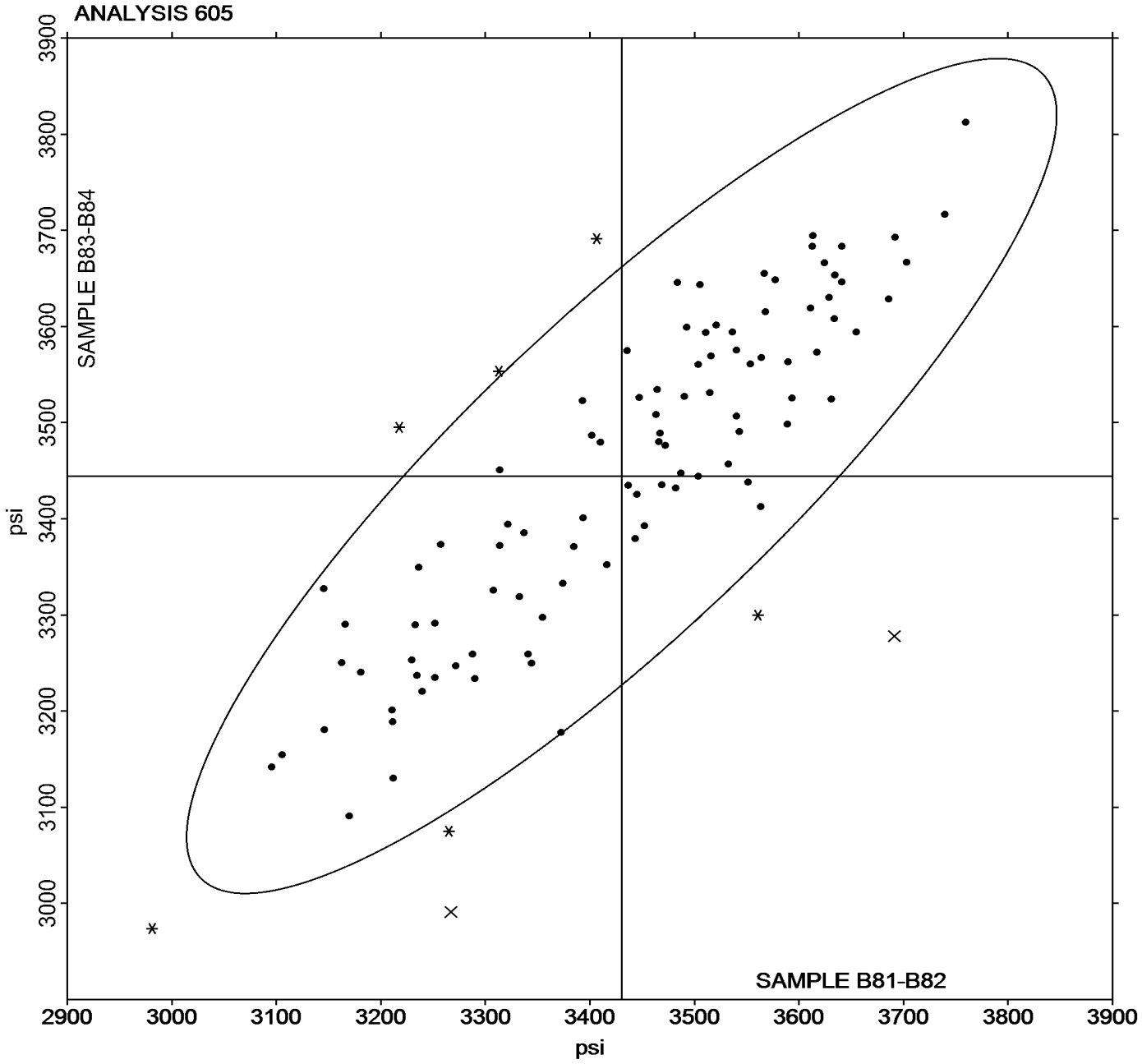
Grand Mean Sample **B81-B82** = 3,430.33 psi

Grand Mean Sample **B83-B84** = 3,444.50 psi



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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
27WPVQ		585.8	-0.8	-0.03	600.7	11.9	0.40
29YTKR		578.7	-7.9	-0.28	587.4	-1.4	-0.05
2PUFHQ		625.7	39.2	1.38	612.6	23.8	0.79
3ATXER		547.0	-39.6	-1.39	544.0	-44.8	-1.49
3E8BJK		558.0	-28.6	-1.00	560.5	-28.3	-0.94
3ND7LQ		597.5	10.9	0.38	598.5	9.7	0.32
3W27UM		619.0	32.4	1.14	618.5	29.7	0.99
47J6ZJ		571.3	-15.3	-0.54	567.7	-21.0	-0.70
4DE8R4	X	534.1	-52.5	-1.84	614.8	26.0	0.87
4JXV9M		570.0	-16.6	-0.58	573.0	-15.8	-0.53
626RVP		581.5	-5.1	-0.18	566.0	-22.8	-0.76
63N3ZV	X	697.0	110.4	3.88	698.0	109.2	3.65
772QTL		627.7	41.1	1.45	633.1	44.3	1.48
7G7FQV	*	544.0	-42.6	-1.50	516.5	-72.3	-2.41
7KDEVN		608.7	22.1	0.78	610.1	21.3	0.71
83T8YH	*	552.0	-34.6	-1.21	585.5	-3.3	-0.11
8AFT84		601.0	14.4	0.51	604.0	15.2	0.51
8UM3B8		590.6	4.0	0.14	596.8	8.0	0.27
8XY7X4		526.2	-60.4	-2.12	539.5	-49.3	-1.65
8YF6DL		530.5	-56.1	-1.97	536.0	-52.8	-1.76
8YTW4H		564.5	-22.1	-0.78	572.5	-16.3	-0.54
9ENFHK		593.5	6.9	0.24	589.0	0.2	0.01
9F48X2	X	479.5	-107.1	-3.76	453.0	-135.8	-4.53
9XDWLE		517.5	-69.1	-2.43	516.5	-72.3	-2.41
ACV292		554.7	-31.8	-1.12	568.4	-20.4	-0.68
AFXCQ2		584.0	-2.6	-0.09	610.5	21.7	0.73
B2UUBF		635.5	48.9	1.72	651.0	62.2	2.08
B3MRG2		536.0	-50.6	-1.78	555.5	-33.3	-1.11
BA8JUR		598.5	11.9	0.42	605.5	16.7	0.56
BBW9WE		625.0	38.4	1.35	611.0	22.2	0.74
BFCJAH	*	510.0	-76.6	-2.69	517.5	-71.3	-2.38
BHMXYH		612.0	25.4	0.89	620.5	31.7	1.06
BR94U2		606.0	19.4	0.68	616.0	27.2	0.91
C4FAKT		606.0	19.4	0.68	635.0	46.2	1.54
C98AA4		600.5	13.9	0.49	587.0	-1.8	-0.06
CK3FCE		629.5	42.9	1.51	629.0	40.2	1.34
DDTLMB		592.4	5.8	0.21	590.0	1.2	0.04
DJJYLD		632.6	46.0	1.62	636.3	47.5	1.59

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
DNU68C		583.5	-3.1	-0.11	563.5	-25.3	-0.84
DT9FLF		562.5	-24.1	-0.85	562.5	-26.3	-0.88
DYX6YX		616.6	30.0	1.05	618.5	29.7	0.99
E9DBA8		583.0	-3.6	-0.13	585.2	-3.6	-0.12
EJZY9L	X	370.9	-215.6	-7.58	363.8	-224.9	-7.51
ETMLXB		579.5	-7.1	-0.25	587.5	-1.3	-0.04
F8PQ8E		588.1	1.5	0.05	607.4	18.6	0.62
FCWR3C		591.5	4.9	0.17	593.0	4.2	0.14
G8JW2D		602.5	15.9	0.56	613.5	24.7	0.83
HAJWB6		595.0	8.4	0.30	588.5	-0.3	-0.01
HJTV9Q		608.2	21.6	0.76	595.6	6.8	0.23
J6YH4A		564.5	-22.1	-0.78	566.5	-22.3	-0.74
J96U2B		618.0	31.4	1.10	619.5	30.7	1.03
JRV4Y7		585.5	-1.1	-0.04	599.5	10.7	0.36
JZR2NU		608.0	21.4	0.75	596.0	7.2	0.24
K4N3A9		563.5	-23.1	-0.81	576.0	-12.8	-0.43
K8BT3J		567.5	-19.1	-0.67	569.0	-19.8	-0.66
K9W94U		562.0	-24.6	-0.86	571.0	-17.8	-0.59
KL72F7		606.0	19.4	0.68	625.3	36.5	1.22
KWQJFB		606.7	20.1	0.71	598.8	10.0	0.34
L2ECK6		588.5	1.9	0.07	597.9	9.1	0.30
L2J9AN		580.5	-6.1	-0.21	585.5	-3.3	-0.11
LEW7P3		580.5	-6.1	-0.21	569.5	-19.3	-0.64
LUHQYH		604.0	17.4	0.61	605.5	16.7	0.56
LWAPDF		633.3	46.7	1.64	639.4	50.6	1.69
M6CZTY		592.0	5.4	0.19	592.5	3.7	0.12
MKBBQN		576.0	-10.6	-0.37	562.0	-26.8	-0.89
MKRM79		551.0	-35.6	-1.25	534.5	-54.3	-1.81
N2MAJ7		590.0	3.4	0.12	593.5	4.7	0.16
NJ79P4		576.5	-10.1	-0.35	576.5	-12.3	-0.41
NP263F		570.0	-16.6	-0.58	581.0	-7.8	-0.26
NQT4GE		539.5	-47.1	-1.65	547.0	-41.8	-1.39
NWQL3Y		565.0	-21.6	-0.76	570.0	-18.8	-0.63
NY4NF4		571.1	-15.5	-0.54	567.0	-21.8	-0.73
P28HWL		566.0	-20.6	-0.72	583.5	-5.3	-0.18
P8DEGL		609.5	22.9	0.81	604.5	15.7	0.53
P9LUNM	X	698.5	111.9	3.93	703.0	114.2	3.81

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
PBEFJ4		565.6	-21.0	-0.74	562.4	-26.4	-0.88
PW8Y73		606.1	19.5	0.69	588.7	-0.1	0.00
Q7AUNX		583.0	-3.6	-0.13	593.0	4.2	0.14
QPPFQE		563.9	-22.7	-0.80	573.8	-15.0	-0.50
QXLDF3		591.5	4.9	0.17	573.0	-15.8	-0.53
R3VTKK	X	799.5	212.9	7.48	798.5	209.7	7.00
TFZ97F	X	488.0	-98.6	-3.46	542.0	-46.8	-1.56
TYMN6W		613.6	27.1	0.95	614.3	25.5	0.85
U2M47R		635.0	48.4	1.70	631.5	42.7	1.43
U6B6E7		565.0	-21.6	-0.76	540.5	-48.3	-1.61
UHUB6U		586.5	-0.1	0.00	609.0	20.2	0.68
UMALJY		631.5	44.9	1.58	641.5	52.7	1.76
UP94CJ		592.5	5.9	0.21	591.0	2.2	0.07
UW9Q2Y		646.5	59.9	2.11	646.0	57.2	1.91
VBLGFQ		559.4	-27.2	-0.96	553.9	-34.9	-1.16
VKZXHY		638.0	51.4	1.81	648.0	59.2	1.98
VMQTZ7		587.0	0.4	0.02	585.5	-3.3	-0.11
W43D9N		576.9	-9.6	-0.34	570.3	-18.4	-0.62
W9CTFR		566.0	-20.6	-0.72	595.0	6.2	0.21
WPN8XP		536.0	-50.6	-1.78	535.5	-53.3	-1.78
WVVQ4V		581.5	-5.1	-0.18	591.5	2.7	0.09
WYNZ4V		612.7	26.2	0.92	619.7	30.9	1.03
X6WH3N		610.7	24.1	0.85	601.9	13.1	0.44
XN8DUU		622.5	35.9	1.26	629.5	40.7	1.36
Y7JJJV		595.0	8.4	0.30	590.0	1.2	0.04
Z2497R	X	1,088.0	501.4	17.62	1,355.0	766.2	25.59
Z2UQB8		573.5	-13.1	-0.46	559.5	-29.3	-0.98
Z3HVGE		580.0	-6.6	-0.23	588.5	-0.3	-0.01
ZYLGHB		591.5	4.9	0.17	580.5	-8.3	-0.28

Summary Statistics

	Sample B81-B82	Sample B83-B84
Grand Means	586.56 percent	588.77 percent
Stnd Dev Btwn Labs	28.46 percent	29.95 percent

Statistics based on 96 of 104 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

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Comments on Assigned Data Flags for Test #606

4DE8R4 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B81-B82.

63N3ZV (X) - Data for all samples are high. Possible Systematic Error.

9F48X2 (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B83-B84.

EJZY9L (X) - Data for all samples are low. Possible Systematic Error.

P9LUNM (X) - Data for all samples are high. Possible Systematic Error. Inconsistent within the determinations of sample group B83-B84.

R3VTKK (X) - Data for all samples are high. Possible Systematic Error. Inconsistent within the determinations of sample group B83-B84.

TFZ97F (X) - Inconsistent in testing between sample groups. Data for sample group B81-B82 are low.

Z2497R (X) - Extreme Data.

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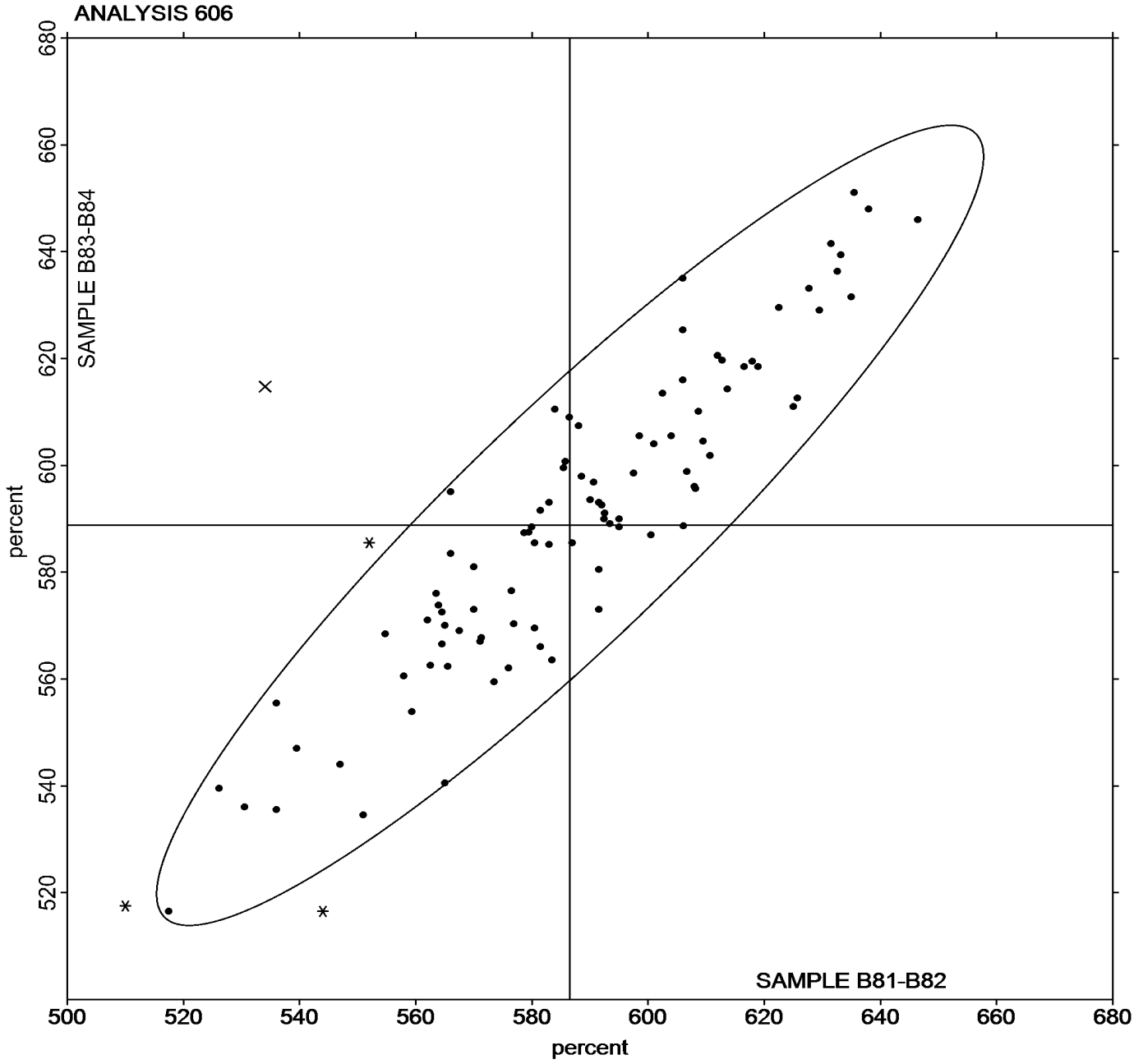
Grand Mean Sample **B81-B82** = 586.56 percent

Grand Mean Sample **B83-B84** = 588.77 percent



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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
27WPVQ		1,201.4	37.5	0.39	1,192.1	38.7	0.38
29YTKR		1,171.2	7.3	0.08	1,148.0	-5.4	-0.05
2PUFHQ		953.1	-210.9	-2.19	998.3	-155.1	-1.53
3ATXER		1,359.0	195.1	2.02	1,380.0	226.6	2.24
3E8BJK	*	1,378.0	214.1	2.22	1,299.5	146.1	1.44
3ND7LQ		1,120.5	-43.4	-0.45	1,117.5	-35.9	-0.35
3W27UM		1,144.5	-19.4	-0.20	1,166.0	12.6	0.12
47J6ZJ		1,182.1	18.2	0.19	1,198.3	44.9	0.44
4DE8R4		1,234.9	71.0	0.74	1,153.7	0.3	0.00
4JXV9M		1,177.0	13.1	0.14	1,164.7	11.3	0.11
626RVP		1,099.5	-64.4	-0.67	1,134.3	-19.1	-0.19
772QTL		1,164.4	0.5	0.00	1,120.0	-33.4	-0.33
7G7FQV		1,328.6	164.6	1.71	1,353.2	199.8	1.98
7KDEVN		1,117.0	-46.9	-0.49	1,138.9	-14.5	-0.14
83T8YH		1,344.0	180.1	1.87	1,259.0	105.6	1.04
8AFT84		1,090.5	-73.4	-0.76	1,090.5	-62.9	-0.62
8UM3B8		1,171.3	7.4	0.08	1,175.1	21.8	0.22
8XY7X4	*	1,307.4	143.5	1.49	1,409.9	256.6	2.54
8YF6DL		1,271.5	107.6	1.12	1,294.5	141.2	1.40
8YTW4H		1,235.0	71.1	0.74	1,169.0	15.6	0.15
9ENFHK		1,184.5	20.6	0.21	1,181.0	27.7	0.27
9F48X2	X	1,361.5	197.6	2.05	1,675.5	522.1	5.16
ACV292		1,246.9	83.0	0.86	1,207.6	54.2	0.54
AFXCQ2		1,232.6	68.7	0.71	1,129.1	-24.3	-0.24
B2UUBF	*	984.1	-179.8	-1.87	902.1	-251.2	-2.48
B3MRG2		1,280.0	116.1	1.20	1,253.9	100.5	0.99
BA8JUR		1,145.0	-18.9	-0.20	1,197.5	44.1	0.44
BBW9WE		1,082.6	-81.3	-0.84	1,100.6	-52.7	-0.52
BFCJAH		1,104.5	-59.4	-0.62	1,105.2	-48.2	-0.48
BHMXYH		974.7	-189.3	-1.96	977.6	-175.8	-1.74
BR94U2		1,143.5	-20.4	-0.21	1,071.5	-81.9	-0.81
C4FAKT		1,142.9	-21.0	-0.22	1,068.2	-85.2	-0.84
C98AA4		1,177.0	13.1	0.14	1,195.5	42.1	0.42
CK3FCE		972.5	-191.4	-1.99	999.5	-153.9	-1.52
DDTLMB		1,226.3	62.4	0.65	1,236.5	83.1	0.82
DJJYLD		1,039.4	-124.5	-1.29	1,034.1	-119.3	-1.18
DNU68C		1,205.0	41.1	0.43	1,295.5	142.1	1.41
DYX6YX		1,106.8	-57.1	-0.59	1,107.5	-45.9	-0.45

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
E9DBA8		1,293.0	129.1	1.34	1,233.9	80.5	0.80
EJZY9L	X	2,433.0	1,269.1	13.16	2,452.6	1,299.2	12.85
ETMLXB		1,072.0	-91.9	-0.95	1,091.0	-62.4	-0.62
F8PQ8E		1,110.0	-53.9	-0.56	1,152.8	-0.6	-0.01
FCWR3C		1,257.0	93.1	0.97	1,262.0	108.6	1.07
G8JW2D		1,104.5	-59.4	-0.62	1,096.0	-57.4	-0.57
HAJWB6		1,106.5	-57.4	-0.60	1,072.0	-81.4	-0.80
HJTV9Q		1,081.2	-82.8	-0.86	1,103.0	-50.3	-0.50
J6YH4A		961.0	-202.9	-2.10	930.0	-223.4	-2.21
JRV4Y7		1,118.5	-45.4	-0.47	1,075.5	-77.9	-0.77
JZR2NU		1,204.5	40.6	0.42	1,195.0	41.6	0.41
K4N3A9		1,354.5	190.6	1.98	1,282.0	128.6	1.27
K8BT3J		1,144.5	-19.4	-0.20	1,141.5	-11.9	-0.12
K9W94U		1,193.5	29.6	0.31	1,118.0	-35.4	-0.35
KL72F7		1,214.1	50.2	0.52	1,138.1	-15.2	-0.15
L2ECK6		978.5	-185.4	-1.92	991.3	-162.1	-1.60
L2J9AN		1,186.5	22.6	0.23	1,133.0	-20.4	-0.20
LEW7P3		1,074.0	-89.9	-0.93	1,105.2	-48.2	-0.48
LUHQYH		1,134.9	-29.0	-0.30	1,129.9	-23.5	-0.23
LWAPDF		1,116.8	-47.1	-0.49	1,124.1	-29.3	-0.29
MKBBQN		1,081.5	-82.4	-0.85	1,079.5	-73.9	-0.73
MKRM79		1,349.6	185.7	1.93	1,392.4	239.0	2.36
N2MAJ7		1,147.3	-16.7	-0.17	1,187.9	34.5	0.34
NJ79P4		1,076.5	-87.4	-0.91	1,047.0	-106.4	-1.05
NP263F		1,221.0	57.1	0.59	1,207.0	53.6	0.53
NQT4GE	*	1,380.0	216.1	2.24	1,288.5	135.1	1.34
NY4NF4		1,321.3	157.4	1.63	1,371.3	218.0	2.16
P28HWL		1,117.5	-46.4	-0.48	1,143.5	-9.9	-0.10
P8DEGL		1,071.0	-92.9	-0.96	1,066.0	-87.4	-0.86
P9LUNM		1,127.0	-37.0	-0.38	1,077.6	-75.7	-0.75
PBEFJ4		1,149.4	-14.5	-0.15	1,161.5	8.1	0.08
PW8Y73	X	1,030.5	-133.4	-1.38	1,166.9	13.6	0.13
Q7AUNX		1,193.0	29.1	0.30	1,146.0	-7.4	-0.07
QPPFQE		1,289.4	125.5	1.30	1,268.7	115.4	1.14
QXLDF3		1,204.7	40.8	0.42	1,228.1	74.7	0.74
R3VTKK	X	806.0	-357.9	-3.71	787.5	-365.9	-3.62
TFZ97F	X	1,994.3	830.4	8.61	1,762.2	608.9	6.02

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
TYMN6W		1,121.0	-42.9	-0.45	1,188.0	34.6	0.34
U2M47R		1,105.0	-58.9	-0.61	1,046.0	-107.4	-1.06
U6B6E7		1,225.0	61.1	0.63	1,210.0	56.6	0.56
UHUB6U		1,060.2	-103.7	-1.08	997.1	-156.2	-1.54
UMALJY		1,087.5	-76.4	-0.79	1,089.0	-64.4	-0.64
UP94CJ		1,144.0	-19.9	-0.21	1,180.5	27.1	0.27
UW9Q2Y		996.7	-167.3	-1.74	995.5	-157.9	-1.56
VBLGFQ		1,278.6	114.7	1.19	1,298.7	145.3	1.44
VKZXHY	*	1,182.5	18.6	0.19	1,049.0	-104.4	-1.03
VMQTZ7		1,158.0	-5.9	-0.06	1,159.0	5.6	0.06
W43D9N		1,245.4	81.4	0.84	1,280.4	127.1	1.26
W9CTFR		1,137.0	-26.9	-0.28	1,132.5	-20.9	-0.21
WPN8XP		1,230.5	66.6	0.69	1,273.5	120.1	1.19
WVVQ4V		1,110.0	-53.9	-0.56	1,132.0	-21.4	-0.21
WYNZ4V		1,161.0	-2.9	-0.03	1,098.6	-54.8	-0.54
X6WH3N		1,144.5	-19.4	-0.20	1,152.9	-0.5	0.00
XN8DUU		1,167.0	3.1	0.03	1,133.5	-19.9	-0.20
Y7JJJV		1,117.5	-46.4	-0.48	1,013.0	-140.4	-1.39
Z2497R	X	1,263.0	99.1	1.03	880.5	-272.9	-2.70
Z2UQB8		1,196.5	32.6	0.34	1,116.5	-36.9	-0.36
Z3HVGE		1,191.0	27.1	0.28	1,196.5	43.1	0.43
ZYLGHB		1,124.0	-39.9	-0.41	1,150.0	-3.4	-0.03

Summary Statistics

	Sample B81-B82	Sample B83-B84
Grand Means	1,163.92 psi	1,153.37 psi
Stnd Dev Btwn Labs	96.40 psi	101.13 psi

Statistics based on 91 of 97 reporting participants

Summary Statistics in SI Units

	Sample B81-B82	Sample B83-B84
Grand Means	8.0249 MPa	7.95 MPa
Stnd Dev Btwn Labs	0.6647 MPa	0.70 MPa

Statistics based on 91 of 97 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

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Comments on Assigned Data Flags for Test #607

9F48X2 (X) - Data for sample group B83-B84 are high. Inconsistent within the determinations of sample group B83-B84.

EJZY9L (X) - Extreme Data.

PW8Y73 (X) - Inconsistent in testing between samples.

R3VTKK (X) - Data for all samples are low. Possible Systematic Error.

TFZ97F (X) - Data for all samples are high. Possible Systematic Error.

Z2497R (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B83-B84.

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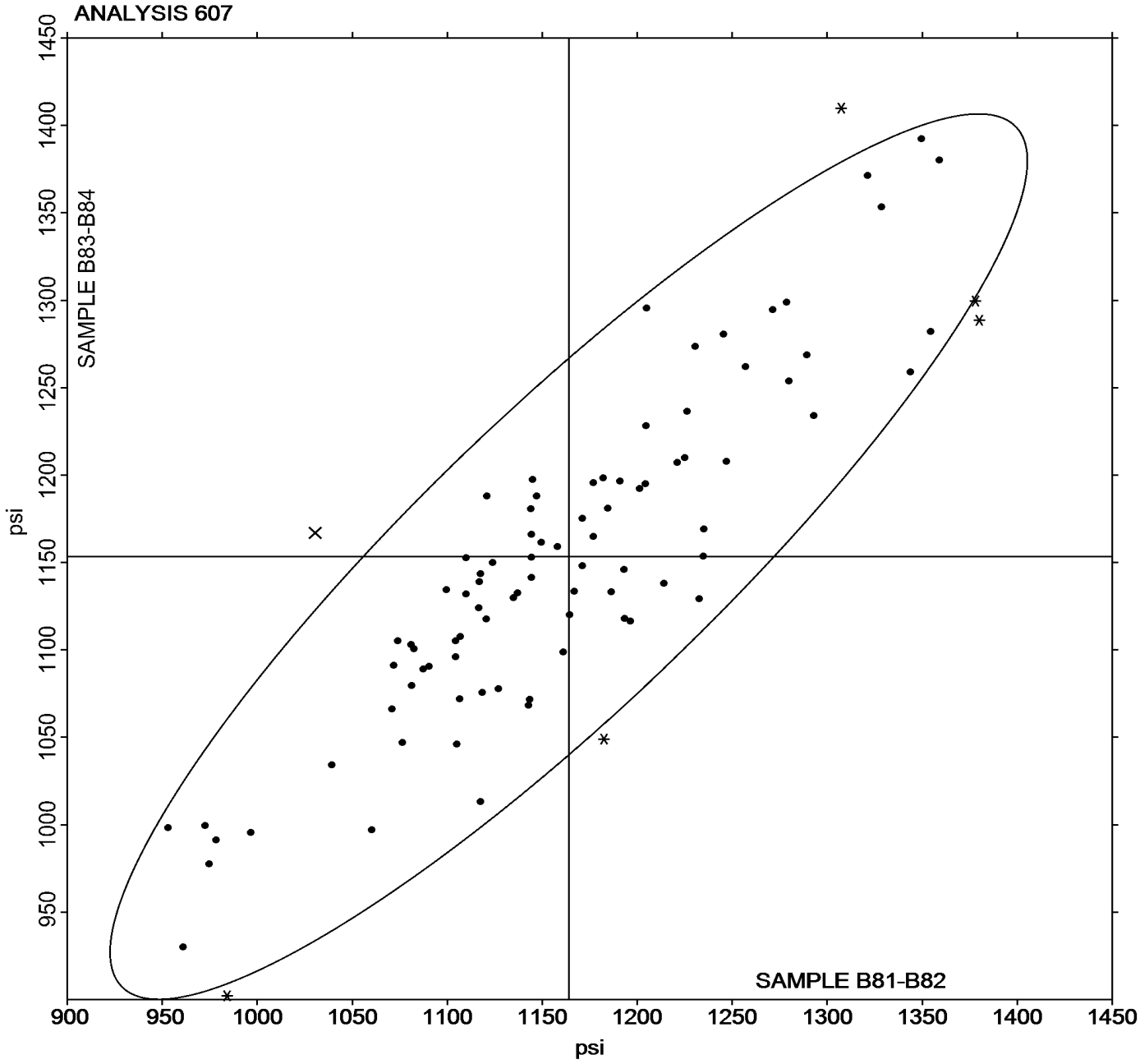
Grand Mean Sample **B81-B82** = 1,163.92 psi

Grand Mean Sample **B83-B84** = 1,153.37 psi



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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
27WPVQ		247.3	1.4	0.09	250.4	5.7	0.33
29YTKR		242.9	-2.9	-0.17	238.6	-6.2	-0.36
2PUFHQ		207.2	-38.7	-2.30	216.5	-28.2	-1.65
3ATXER		262.5	16.6	0.99	264.5	19.8	1.16
3E8BJK		263.0	17.1	1.02	260.0	15.3	0.89
3ND7LQ		232.5	-13.4	-0.80	232.0	-12.7	-0.75
3W27UM		242.0	-3.9	-0.23	254.0	9.3	0.54
47J6ZJ		241.7	-4.2	-0.25	246.4	1.7	0.10
4DE8R4		270.9	25.1	1.49	263.2	18.4	1.08
4JXV9M		249.5	3.6	0.21	243.7	-1.1	-0.06
626RVP		243.5	-2.4	-0.14	251.8	7.0	0.41
772QTL		249.2	3.3	0.20	237.9	-6.9	-0.40
7G7FQV		269.0	23.2	1.38	264.7	20.0	1.17
7KDEVN		243.7	-2.2	-0.13	244.9	0.2	0.01
83T8YH	*	267.0	21.1	1.26	243.5	-1.2	-0.07
8AFT84		232.5	-13.4	-0.80	231.0	-13.7	-0.81
8UM3B8		245.7	-0.2	-0.01	246.6	1.8	0.11
8XY7X4		259.5	13.7	0.81	269.0	24.3	1.43
8YF6DL		237.1	-8.7	-0.52	241.5	-3.3	-0.19
8YTW4H		257.4	11.6	0.69	242.9	-1.8	-0.11
9ENFHK		255.2	9.3	0.56	257.0	12.2	0.72
9F48X2	X	236.5	-9.4	-0.56	288.5	43.8	2.57
ACV292		259.0	13.2	0.78	242.9	-1.8	-0.11
AFXCQ2		243.5	-2.4	-0.14	233.7	-11.0	-0.65
B2UUBF	*	216.8	-29.0	-1.73	203.1	-41.7	-2.44
B3MRG2		285.0	39.1	2.33	283.6	38.8	2.28
BA8JUR		249.0	3.1	0.19	266.0	21.3	1.25
BBW9WE		234.5	-11.3	-0.68	242.5	-2.2	-0.13
BFCJAH		225.5	-20.3	-1.21	222.6	-22.1	-1.30
BHMXYH		227.0	-18.9	-1.12	227.0	-17.8	-1.04
BR94U2		251.5	5.6	0.34	239.0	-5.7	-0.34
C4FAKT		246.6	0.7	0.04	240.8	-4.0	-0.23
C98AA4		249.5	3.6	0.22	256.5	11.8	0.69
CK3FCE		219.5	-26.4	-1.57	222.0	-22.7	-1.33
DDTLMB		258.9	13.0	0.78	261.1	16.3	0.96
DJJYLD		238.9	-7.0	-0.42	241.4	-3.4	-0.20
DNU68C		253.0	7.1	0.42	262.0	17.3	1.01
DYX6YX		234.9	-11.0	-0.65	237.2	-7.5	-0.44

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
E9DBA8		282.5	36.7	2.18	270.9	26.1	1.53
EJZY9L	X	475.7	229.9	13.69	484.4	239.7	14.06
ETMLXB		234.0	-11.9	-0.71	236.5	-8.2	-0.48
F8PQ8E		235.0	-10.9	-0.65	240.8	-4.0	-0.23
FCWR3C		279.5	33.6	2.00	278.0	33.3	1.95
G8JW2D		239.0	-6.9	-0.41	242.5	-2.2	-0.13
HAJWB6		236.5	-9.4	-0.56	231.0	-13.7	-0.81
HJTV9Q		254.6	8.7	0.52	249.7	4.9	0.29
J6YH4A	*	196.0	-49.9	-2.97	201.5	-43.2	-2.54
J96U2B		244.5	-1.4	-0.08	233.5	-11.2	-0.66
JRV4Y7		249.0	3.1	0.19	240.5	-4.2	-0.25
JZR2NU		276.5	30.6	1.82	284.0	39.3	2.30
K4N3A9		272.5	26.6	1.59	254.0	9.3	0.54
K8BT3J		246.5	0.6	0.04	248.5	3.8	0.22
K9W94U		255.5	9.6	0.57	244.0	-0.7	-0.04
KL72F7		254.7	8.8	0.53	244.4	-0.3	-0.02
L2ECK6		212.9	-33.0	-1.96	215.9	-28.8	-1.69
L2J9AN		224.5	-21.4	-1.27	218.0	-26.7	-1.57
LEW7P3		221.2	-24.7	-1.47	228.4	-16.3	-0.96
LUHQYH		237.9	-8.0	-0.48	244.4	-0.3	-0.02
LWAPDF		246.6	0.7	0.04	253.8	9.1	0.53
MKBBQN		235.0	-10.9	-0.65	231.0	-13.7	-0.81
MKRM79		275.6	29.7	1.77	273.4	28.7	1.68
N2MAJ7		232.1	-13.8	-0.82	244.4	-0.3	-0.02
NJ79P4		218.5	-27.4	-1.63	216.0	-28.7	-1.69
NP263F		257.0	11.1	0.66	256.0	11.3	0.66
NQT4GE		263.0	17.1	1.02	261.0	16.3	0.95
NY4NF4	X	325.6	79.7	4.75	324.2	79.4	4.66
P28HWL		237.5	-8.4	-0.50	248.5	3.8	0.22
P8DEGL		236.0	-9.9	-0.59	234.0	-10.7	-0.63
P9LUNM	X	312.6	66.7	3.97	279.2	34.5	2.02
PBEFJ4		257.8	11.9	0.71	257.1	12.4	0.73
PW8Y73	X	217.0	-28.8	-1.72	249.2	4.4	0.26
Q7AUNX		244.5	-1.4	-0.08	239.0	-5.7	-0.34
QPPFQE		248.7	2.9	0.17	245.8	1.1	0.06
QXLDF3		274.9	29.1	1.73	281.8	37.1	2.18
R3VTKK		243.0	-2.9	-0.17	242.0	-2.7	-0.16

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
TFZ97F	X	351.0	105.1	6.26	337.0	92.3	5.41
TYMN6W		243.1	-2.8	-0.17	252.4	7.7	0.45
U2M47R		235.0	-10.9	-0.65	221.5	-23.2	-1.36
U6B6E7		277.0	31.1	1.85	272.5	27.8	1.63
UHUB6U		227.0	-18.9	-1.12	220.5	-24.3	-1.42
UMALJY		241.5	-4.4	-0.26	245.0	0.3	0.02
UP94CJ		231.0	-14.9	-0.89	237.5	-7.2	-0.42
UW9Q2Y		224.7	-21.2	-1.26	224.7	-20.1	-1.18
VBLGFQ		262.5	16.6	0.99	268.3	23.6	1.38
VKZXHY	X	229.5	-16.4	-0.98	201.0	-43.7	-2.57
VMQTZ7		238.0	-7.9	-0.47	237.5	-7.2	-0.42
W43D9N		244.7	-1.2	-0.07	253.0	8.2	0.48
W9CTFR		243.0	-2.9	-0.17	238.5	-6.2	-0.37
WPN8XP		256.5	10.6	0.63	258.0	13.3	0.78
WVVQ4V		233.0	-12.9	-0.77	238.0	-6.7	-0.40
WYNZ4V		246.7	0.8	0.05	235.3	-9.5	-0.55
X6WH3N		256.2	10.3	0.62	262.2	17.4	1.02
XN8DUU		248.0	2.1	0.13	241.0	-3.7	-0.22
Y7JJJV		239.0	-6.9	-0.41	223.5	-21.2	-1.25
Z2497R		237.5	-8.4	-0.50	230.5	-14.2	-0.84
Z2UQB8	*	250.0	4.1	0.25	226.0	-18.7	-1.10
Z3HVGE		258.0	12.1	0.72	262.0	17.3	1.01
ZYLGHB		246.5	0.6	0.04	252.0	7.3	0.43

Summary Statistics

	Sample B81-B82	Sample B83-B84
Grand Means	245.87 psi	244.74 psi
Stnd Dev Btwn Labs	16.79 psi	17.05 psi

Statistics based on 91 of 98 reporting participants

Summary Statistics in SI Units

	Sample B81-B82	Sample B83-B84
Grand Means	1.6952 MPa	1.69 MPa
Stnd Dev Btwn Labs	0.1157 MPa	0.12 MPa

Statistics based on 91 of 98 reporting participants

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Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #608

9F48X2 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B83-B84.

EJZY9L (X) - Extreme Data.

NY4NF4 (X) - Data for all samples are high. Possible Systematic Error.

P9LUNM (X) - Inconsistent in testing between sample groups. Data for sample group B81-B82 are high.

PW8Y73 (X) - Inconsistent in testing between samples.

TFZ97F (X) - Data for all samples are high. Possible Systematic Error.

VKZXHY (X) - Inconsistent in testing between samples.

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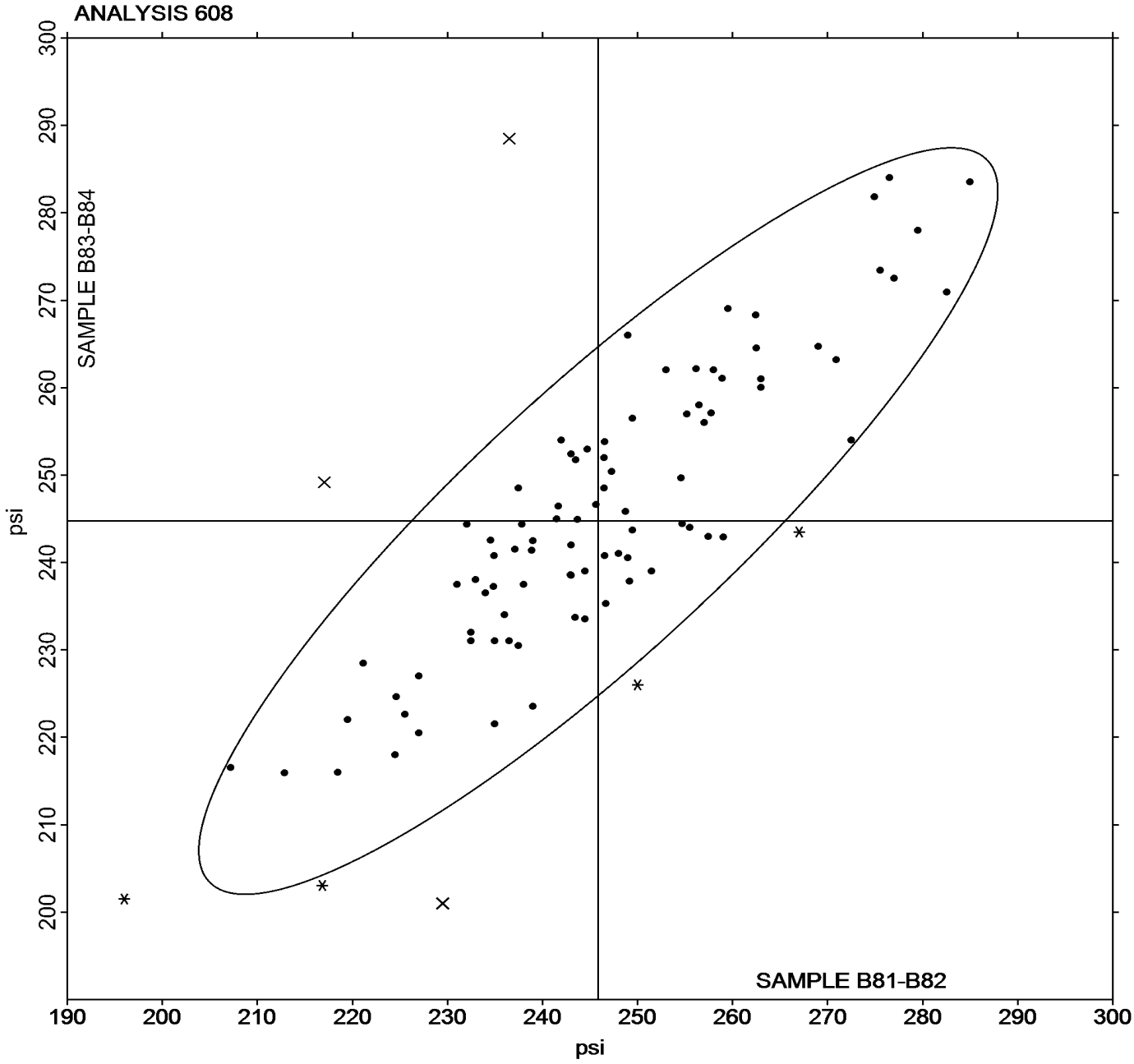
Grand Mean Sample **B81-B82** = 245.87 psi

Grand Mean Sample **B83-B84** = 244.74 psi



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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
27WPVQ		48.50	-2.16	-1.66	48.00	-2.58	-1.92	BT
29YTKR		51.60	0.94	0.72	51.95	1.37	1.02	BT
2PUFHQ		49.25	-1.41	-1.08	49.25	-1.33	-0.99	BT
3ATXER		51.30	0.64	0.49	50.85	0.27	0.20	BT
3E8BJK		52.00	1.34	1.03	52.00	1.42	1.05	HH
3ND7LQ		51.00	0.34	0.26	50.00	-0.58	-0.43	BT
3W27UM		52.85	2.19	1.68	52.05	1.47	1.09	BT
47J6ZJ		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
4DE8R4		50.85	0.19	0.14	50.20	-0.38	-0.28	BT
4JXV9M		49.45	-1.21	-0.93	49.90	-0.68	-0.51	BT
63N3ZV		49.50	-1.16	-0.89	49.50	-1.08	-0.80	BT
772QTL		51.85	1.19	0.91	51.10	0.52	0.38	BT
7G7FQV		49.00	-1.66	-1.28	47.85	-2.73	-2.03	BT
7KDEVN		51.00	0.34	0.26	50.00	-0.58	-0.43	BT
83T8YH		50.00	-0.66	-0.51	49.45	-1.13	-0.84	BT
8AFT84		49.00	-1.66	-1.28	49.50	-1.08	-0.80	BT
8UM3B8		49.00	-1.66	-1.28	49.50	-1.08	-0.80	HH
8XY7X4		50.25	-0.41	-0.32	50.25	-0.33	-0.25	BT
8YF6DL		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
8YTW4H		52.45	1.79	1.37	51.50	0.92	0.68	BT
9AAX24		49.50	-1.16	-0.89	49.50	-1.08	-0.80	BT
9ENFHK	*	53.00	2.34	1.79	51.50	0.92	0.68	HH
9F48X2		50.00	-0.66	-0.51	50.50	-0.08	-0.06	BT
9XDWLE		53.00	2.34	1.79	52.50	1.92	1.42	HH
ACV292		49.80	-0.86	-0.66	50.05	-0.53	-0.39	BT
AFXCQ2		48.50	-2.16	-1.66	49.50	-1.08	-0.80	BT
B2UUBF		49.70	-0.96	-0.74	48.70	-1.88	-1.40	BT
B3MRG2		51.45	0.79	0.60	51.65	1.07	0.79	BT
BA8JUR		50.75	0.09	0.07	50.90	0.32	0.24	XX
BBW9WE		50.00	-0.66	-0.51	50.50	-0.08	-0.06	HH
BFCJAH	*	49.00	-1.66	-1.28	47.50	-3.08	-2.29	BT
BHMXYH		53.00	2.34	1.79	52.50	1.92	1.42	HH
BR94U2		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
C4FAKT		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
C98AA4		51.50	0.84	0.64	51.00	0.42	0.31	BT
CK3FCE		50.00	-0.66	-0.51	49.50	-1.08	-0.80	BT
CLVEHZ		52.00	1.34	1.03	52.00	1.42	1.05	XX
DDTLMB		50.00	-0.66	-0.51	50.50	-0.08	-0.06	HH

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
DJJYLD		53.15	2.49	1.91	52.85	2.27	1.68	BT
DNU68C	X	55.00	4.34	3.33	54.00	3.42	2.54	HH
DT9FLF		48.50	-2.16	-1.66	49.00	-1.58	-1.17	BT
DYX6YX		50.50	-0.16	-0.13	50.00	-0.58	-0.43	BT
E9DBA8		52.00	1.34	1.03	52.00	1.42	1.05	BT
EJZY9L		50.60	-0.06	-0.05	51.75	1.17	0.87	BT
ETMLXB	X	52.00	1.34	1.03	49.00	-1.58	-1.17	HH
F8PQ8E		51.25	0.59	0.45	51.25	0.67	0.50	HH
G8JW2D		53.00	2.34	1.79	53.50	2.92	2.17	HH
HAJWB6		50.00	-0.66	-0.51	49.00	-1.58	-1.17	BT
HJTV9Q		53.00	2.34	1.79	53.00	2.42	1.80	HH
J6YH4A		50.30	-0.36	-0.28	50.40	-0.18	-0.13	XX
J96U2B		51.00	0.34	0.26	51.50	0.92	0.68	BT
JB9MXU		50.15	-0.51	-0.39	50.15	-0.43	-0.32	BT
JRV4Y7		50.75	0.09	0.07	50.50	-0.08	-0.06	HH
JZR2NU		50.05	-0.61	-0.47	51.25	0.67	0.50	HH
K4N3A9		49.00	-1.66	-1.28	48.00	-2.58	-1.92	BT
K8BT3J		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
K9W94U		50.00	-0.66	-0.51	50.00	-0.58	-0.43	HH
KL72F7		51.80	1.14	0.87	51.60	1.02	0.76	BT
KWQJFB		50.50	-0.16	-0.13	49.50	-1.08	-0.80	BT
L2ECK6	X	58.00	7.34	5.63	58.00	7.42	5.51	BT
L2J9AN		51.50	0.84	0.64	51.50	0.92	0.68	HH
LEW7P3	X	55.50	4.84	3.71	55.50	4.92	3.65	BT
LUHQYH		50.50	-0.16	-0.13	50.00	-0.58	-0.43	BT
LWAPDF		50.50	-0.16	-0.13	50.00	-0.58	-0.43	XX
M6CZTY		51.00	0.34	0.26	51.00	0.42	0.31	BT
MEMQMS		50.50	-0.16	-0.13	50.50	-0.08	-0.06	HH
MKBBQN		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
MKRM79		51.50	0.84	0.64	52.00	1.42	1.05	HH
NJ79P4		49.00	-1.66	-1.28	49.50	-1.08	-0.80	BT
NP263F		50.25	-0.41	-0.32	50.30	-0.28	-0.21	BT
NQT4GE		50.00	-0.66	-0.51	50.00	-0.58	-0.43	HH
NWQL3Y		53.75	3.09	2.37	53.25	2.67	1.98	HH
NY4NF4		50.40	-0.26	-0.20	50.75	0.17	0.12	BT
P28HWL		50.40	-0.26	-0.20	50.40	-0.18	-0.13	BT
P8DEGL		50.90	0.24	0.18	50.40	-0.18	-0.13	BT

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
P9LUNM	X	57.30	6.64	5.09	57.10	6.52	4.84	BT
PBEFJ4	X	55.00	4.34	3.33	55.00	4.42	3.28	HH
PLUAWH		49.50	-1.16	-0.89	48.50	-2.08	-1.55	BT
PW8Y73		51.65	0.99	0.76	51.90	1.32	0.98	BT
Q7AUNX		51.00	0.34	0.26	51.00	0.42	0.31	HH
QPPFQE		50.90	0.24	0.18	50.45	-0.13	-0.10	BT
QXLDF3		48.38	-2.29	-1.76	48.38	-2.21	-1.64	BT
R3VTKK		50.00	-0.66	-0.51	50.00	-0.58	-0.43	BT
TFZ97F		51.50	0.84	0.64	52.50	1.92	1.42	BT
TYMN6W		53.00	2.34	1.79	53.00	2.42	1.80	HH
U2M47R		50.55	-0.11	-0.09	50.55	-0.03	-0.02	BT
U6B6E7		50.50	-0.16	-0.13	50.50	-0.08	-0.06	HH
UHUB6U		51.00	0.34	0.26	52.00	1.42	1.05	BT
UMALJY	X	52.95	2.29	1.76	50.95	0.37	0.27	BT
UP94CJ		50.00	-0.66	-0.51	50.50	-0.08	-0.06	HH
UW9Q2Y		51.50	0.84	0.64	51.40	0.82	0.61	BT
VBLGFQ	X	44.00	-6.66	-5.11	46.00	-4.58	-3.40	BT
VKZXHY	X	53.50	2.84	2.18	51.75	1.17	0.87	HH
VMQTZ7		50.00	-0.66	-0.51	50.00	-0.58	-0.43	HH
W9CTFR		49.50	-1.16	-0.89	49.50	-1.08	-0.80	BT
WPN8XP		49.00	-1.66	-1.28	49.00	-1.58	-1.17	BT
WVVQ4V		50.50	-0.16	-0.13	50.00	-0.58	-0.43	HH
WYNZ4V		49.65	-1.01	-0.78	49.75	-0.83	-0.62	BT
X6WH3N		53.50	2.84	2.18	53.50	2.92	2.17	BT
XN8DUU		50.80	0.14	0.11	50.45	-0.13	-0.10	BT
Y7JJJV		51.50	0.84	0.64	51.50	0.92	0.68	HH
Z2497R		50.60	-0.06	-0.05	50.55	-0.03	-0.02	BT
Z2UQB8	X	46.00	-4.66	-3.58	45.00	-5.58	-4.15	BT
Z3HVGE		52.00	1.34	1.03	53.00	2.42	1.80	HH
ZACZ9U	*	54.00	3.34	2.56	54.00	3.42	2.54	BT
ZWCYXE		50.50	-0.16	-0.13	50.50	-0.08	-0.06	BT
ZYLGHB	*	47.50	-3.16	-2.43	48.00	-2.58	-1.92	BT

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Summary Statistics		
Grand Means	50.663 Type A	50.582 Type A
Stnd Dev Btwn Labs	1.303 Type A	1.347 Type A

Statistics based on 97 of 107 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #620

DNU68C (X) - Inconsistent in testing between samples. Data for sample group B81-B82 are high.

ETMLXB (X) - Inconsistent in testing between samples.

L2ECK6 (X) - Data for all samples are high. Possible Systematic Error.

LEW7P3 (X) - Data for all samples are high. Possible Systematic Error.

P9LUNM (X) - Data for all samples are high. Possible Systematic Error.

PBEFJ4 (X) - Data for all samples are high. Possible Systematic Error.

UMALJY (X) - Inconsistent in testing between samples.

VBLGFQ (X) - Inconsistent in testing between samples. Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B81-B82.

VKZXHY (X) - Inconsistent in testing between samples.

Z2UQB8 (X) - Data for all samples are low. Possible Systematic Error.

Key to Instrument Codes Reported by Participants

BT	Benchtop	HH	Handheld
XX	Specify Benchtop or Handheld Instrument		

Results by Reading Time (as reported by laboratory)

	Sample B81-B82 *Polyisoprene compound, batch #1*			Sample B83-B84 *Polyisoprene compound, batch #2*				
Reading Time	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Select from list below	50.30	0.00	-0.36	50.40	0.00	-0.18	1	1
Readings taken within 0 - 5 seconds	50.78	1.11	0.11	50.74	1.11	0.16	67	76
Readings taken at 5 seconds	49.67	0.92	-0.99	49.45	0.86	-1.13	10	13
Readings taken after 5+ seconds	50.38	1.51	-0.28	50.20	1.73	-0.38	9	9
Maximum hardness indicator used	51.40	1.48	0.74	51.54	1.55	0.96	6	8

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Results by Reading Time (as reported by laboratory)

Reading Time	Sample B81-B82 *Polyisoprene compound, batch #1* Group Mean	Btwn Lab STD	Diff from GM	Sample B83-B84 *Polyisoprene compound, batch #2* Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	Labs Rpt
Select from list below	50.30	0.00	-0.36	50.40	0.00	-0.18	1	1
Readings taken within 0 - 5 seconds	50.78	1.11	0.11	50.74	1.11	0.16	67	76
Readings taken at 5 seconds	49.67	0.92	-0.99	49.45	0.86	-1.13	10	13
Readings taken after 5+ seconds	50.38	1.51	-0.28	50.20	1.73	-0.38	9	9
Maximum hardness indicator used	51.40	1.48	0.74	51.54	1.55	0.96	6	8

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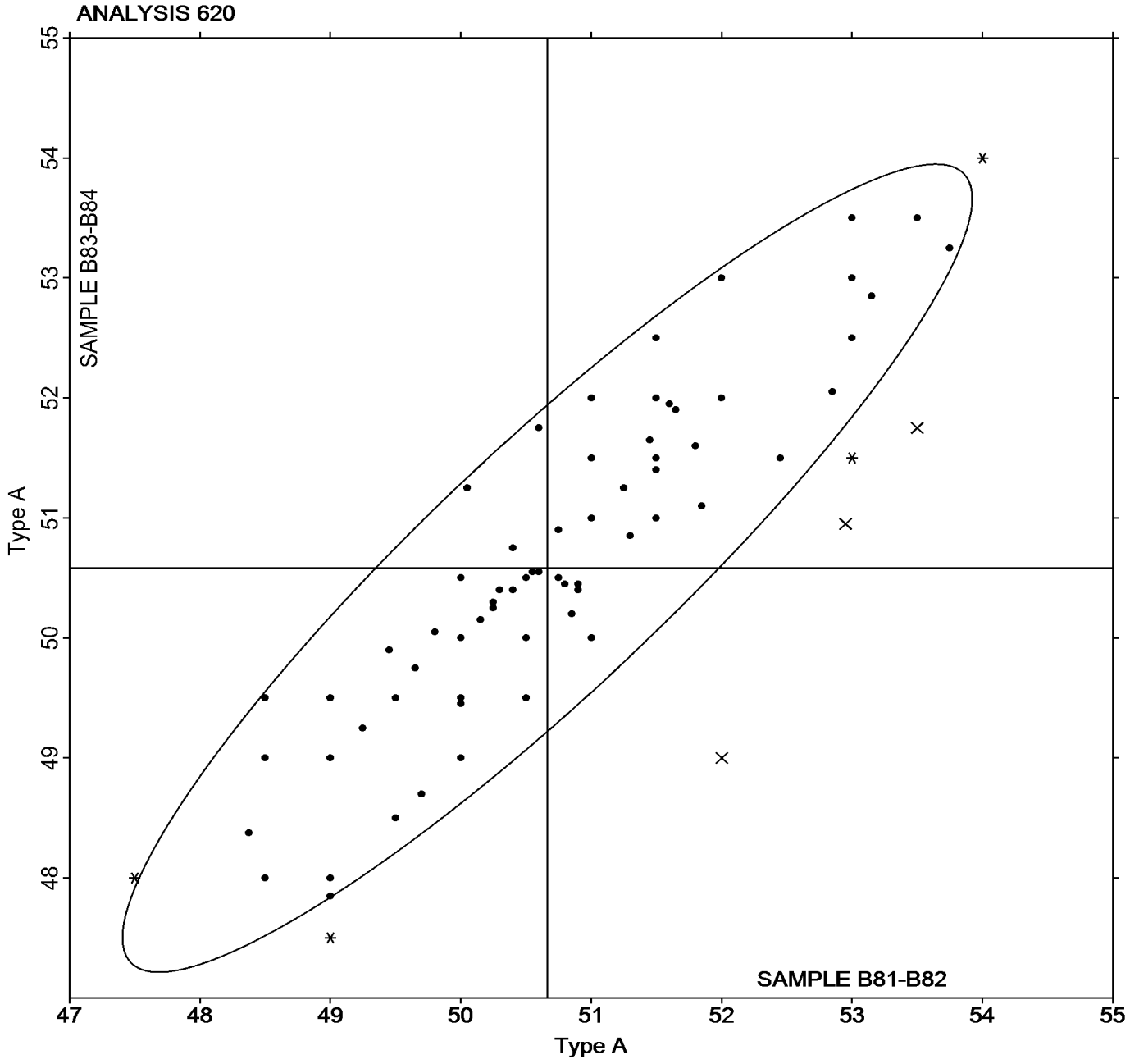
Grand Mean Sample **B81-B82** = 50.663 Type A

Grand Mean Sample **B83-B84** = 50.582 Type A



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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
27WPVQ		1.134	-0.002	-0.68	1.134	-0.002	-0.75
2PUFHQ	X	1.133	-0.003	-0.84	1.126	-0.010	-3.21
3E8BJK		1.130	-0.006	-1.74	1.130	-0.006	-1.83
3ND7LQ		1.138	0.002	0.68	1.137	0.001	0.17
3W27UM		1.135	-0.001	-0.23	1.136	0.000	0.08
47J6ZJ		1.132	-0.004	-1.06	1.132	-0.004	-1.11
4DE8R4	X	1.137	0.001	0.37	1.132	-0.004	-1.37
4JXV9M		1.134	-0.002	-0.61	1.134	-0.002	-0.64
626RVP		1.138	0.002	0.58	1.138	0.002	0.56
63N3ZV		1.135	-0.001	-0.26	1.135	-0.001	-0.26
772QTL		1.139	0.003	1.01	1.139	0.003	1.00
7G7FQV		1.131	-0.005	-1.44	1.132	-0.004	-1.37
7KDEVN		1.134	-0.002	-0.68	1.136	0.000	-0.14
8AFT84		1.136	0.000	0.15	1.138	0.002	0.76
8UM3B8		1.132	-0.004	-1.29	1.132	-0.004	-1.37
8XY7X4		1.143	0.007	2.17	1.144	0.008	2.34
8YTW4H		1.136	0.000	-0.08	1.135	-0.001	-0.29
9ENFHK		1.141	0.005	1.55	1.140	0.004	1.17
9F48X2		1.140	0.004	1.28	1.140	0.004	1.25
ACV292		1.137	0.001	0.24	1.137	0.001	0.17
AFXCQ2		1.135	-0.001	-0.38	1.135	-0.001	-0.44
B3MRG2		1.134	-0.001	-0.43	1.134	-0.002	-0.49
BBW9WE		1.143	0.007	2.19	1.143	0.007	2.05
BFCJAH	X	1.132	-0.004	-1.23	1.136	0.000	0.06
BR94U2		1.136	0.000	0.07	1.136	0.000	-0.14
C4FAKT		1.137	0.001	0.25	1.136	0.000	0.05
C98AA4		1.140	0.004	1.13	1.138	0.002	0.48
CK3FCE		1.135	-0.001	-0.23	1.135	-0.001	-0.44
DJJYLD		1.135	-0.001	-0.31	1.134	-0.002	-0.55
DNU68C		1.137	0.001	0.33	1.137	0.001	0.39
DT9FLF		1.137	0.001	0.37	1.137	0.001	0.32
DYX6YX		1.135	-0.001	-0.32	1.136	0.000	0.06
E9DBA8		1.139	0.003	0.88	1.141	0.005	1.44
EJZY9L		1.134	-0.002	-0.56	1.134	-0.002	-0.64
ETMLXB	*	1.132	-0.004	-1.14	1.135	-0.001	-0.29
F8PQ8E	X	1.124	-0.012	-3.55	1.122	-0.014	-4.45
G8JW2D	X	1.132	-0.004	-1.29	1.139	0.003	0.79
HAJWB6		1.135	-0.001	-0.38	1.136	0.000	-0.14

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
HJTV9Q		1.134	-0.002	-0.67	1.133	-0.003	-0.95
J6YH4A	X	1.130	-0.006	-1.74	1.135	-0.001	-0.44
J96U2B		1.142	0.006	1.78	1.140	0.004	1.36
JZR2NU		1.138	0.002	0.63	1.139	0.003	0.85
K4N3A9		1.137	0.001	0.37	1.137	0.001	0.32
K9W94U		1.135	-0.001	-0.38	1.135	-0.001	-0.44
KL72F7		1.133	-0.003	-0.76	1.132	-0.004	-1.15
KWQJFB		1.139	0.003	0.98	1.138	0.002	0.63
L2ECK6		1.140	0.004	1.28	1.140	0.004	1.25
L2J9AN	X	1.120	-0.016	-4.76	1.121	-0.015	-4.60
LEW7P3		1.137	0.001	0.37	1.136	0.000	0.02
LUHQYH		1.136	0.000	-0.08	1.135	-0.001	-0.29
LWAPDF	*	1.126	-0.010	-2.99	1.126	-0.010	-3.09
M6CZTY		1.135	-0.001	-0.23	1.136	0.000	-0.14
MEMQM9		1.132	-0.003	-1.05	1.133	-0.002	-0.77
MKBBQN		1.137	0.001	0.27	1.137	0.001	0.23
NP263F		1.134	-0.002	-0.64	1.134	-0.002	-0.55
NQT4GE		1.136	0.000	0.07	1.137	0.001	0.17
NWQL3Y	X	1.125	-0.011	-3.36	1.125	-0.011	-3.43
NY4NF4		1.135	-0.001	-0.19	1.136	0.000	0.00
P28HWL		1.134	-0.002	-0.56	1.136	0.000	-0.06
P8DEGL		1.136	0.000	0.06	1.136	0.000	-0.06
P9LUNM		1.132	-0.004	-1.14	1.132	-0.004	-1.37
PBEFJ4	X	1.121	-0.015	-4.61	1.123	-0.013	-3.98
PW8Y73		1.129	-0.006	-1.94	1.131	-0.005	-1.61
Q7AUNX		1.133	-0.003	-0.99	1.133	-0.003	-1.06
QPPFQE		1.135	-0.001	-0.28	1.134	-0.001	-0.46
QXLDF3		1.138	0.003	0.81	1.138	0.002	0.59
R3VTKK		1.138	0.002	0.69	1.139	0.003	0.89
TFZ97F	X	1.130	-0.006	-1.74	1.135	-0.001	-0.29
U2M47R		1.136	0.000	-0.08	1.135	-0.001	-0.29
U6B6E7		1.138	0.002	0.68	1.137	0.001	0.17
UW9Q2Y	X	1.119	-0.017	-5.08	1.115	-0.021	-6.51
VBLGFQ	X	1.118	-0.017	-5.26	1.133	-0.003	-0.91
VMQTZ7	X	1.128	-0.008	-2.48	1.124	-0.011	-3.54
W43D9N		1.141	0.005	1.56	1.142	0.006	1.77
WVVQ4V		1.137	0.001	0.37	1.137	0.001	0.32

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Diff from Grand Mean	CPV	Sample B83-B84 Lab Mean	Diff from Grand Mean	CPV
X6WH3N		1.138	0.002	0.54	1.139	0.003	0.99
XN8DUU		1.134	-0.002	-0.52	1.135	-0.001	-0.28
Y7JJJV		1.138	0.002	0.52	1.137	0.001	0.32
Z2497R		1.133	-0.002	-0.71	1.133	-0.003	-0.81
Z2UQB8	X	1.135	-0.001	-0.23	1.130	-0.006	-1.83
Z3HVGE		1.130	-0.006	-1.86	1.131	-0.005	-1.66
ZACZ9U		1.140	0.004	1.17	1.141	0.005	1.63
ZYLGHB		1.142	0.006	1.88	1.143	0.007	2.17

Summary Statistics

Grand Means	1.1358 g/cm^3 (Mg/m^3)	1.1359 g/cm^3 (Mg/m^3)
Stnd Dev Btwn Labs	0.0033 g/cm^3 (Mg/m^3)	0.0032 g/cm^3 (Mg/m^3)

Statistics based on 69 of 83 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & B83-B84: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #621

2PUFHQ (X) - Data for sample group B83-B84 are low.

4DE8R4 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both sample groups.

BFCJAH (X) - Inconsistent in testing between samples.

F8PQ8E (X) - Data for all samples are low. Possible Systematic Error.

G8JW2D (X) - Inconsistent in testing between samples.

J6YH4A (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B81-B82.

L2J9AN (X) - Data for all samples are low. Possible Systematic Error.

NWQL3Y (X) - Data for all samples are low. Possible Systematic Error.

PBEFJ4 (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B83-B84.

TFZ97F (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B81-B82.

UW9Q2Y (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B83-B84.

VBLGFQ (X) - Inconsistent in testing between samples. Data for sample group B81-B82 are low. Inconsistent within the determinations of sample group B81-B82.

VMQTZ7 (X) - Inconsistent in testing between samples. Data for sample group B83-B84 are low. Inconsistent within the determinations of sample group B83-B84.

Z2UQB8 (X) - Inconsistent in testing between samples.

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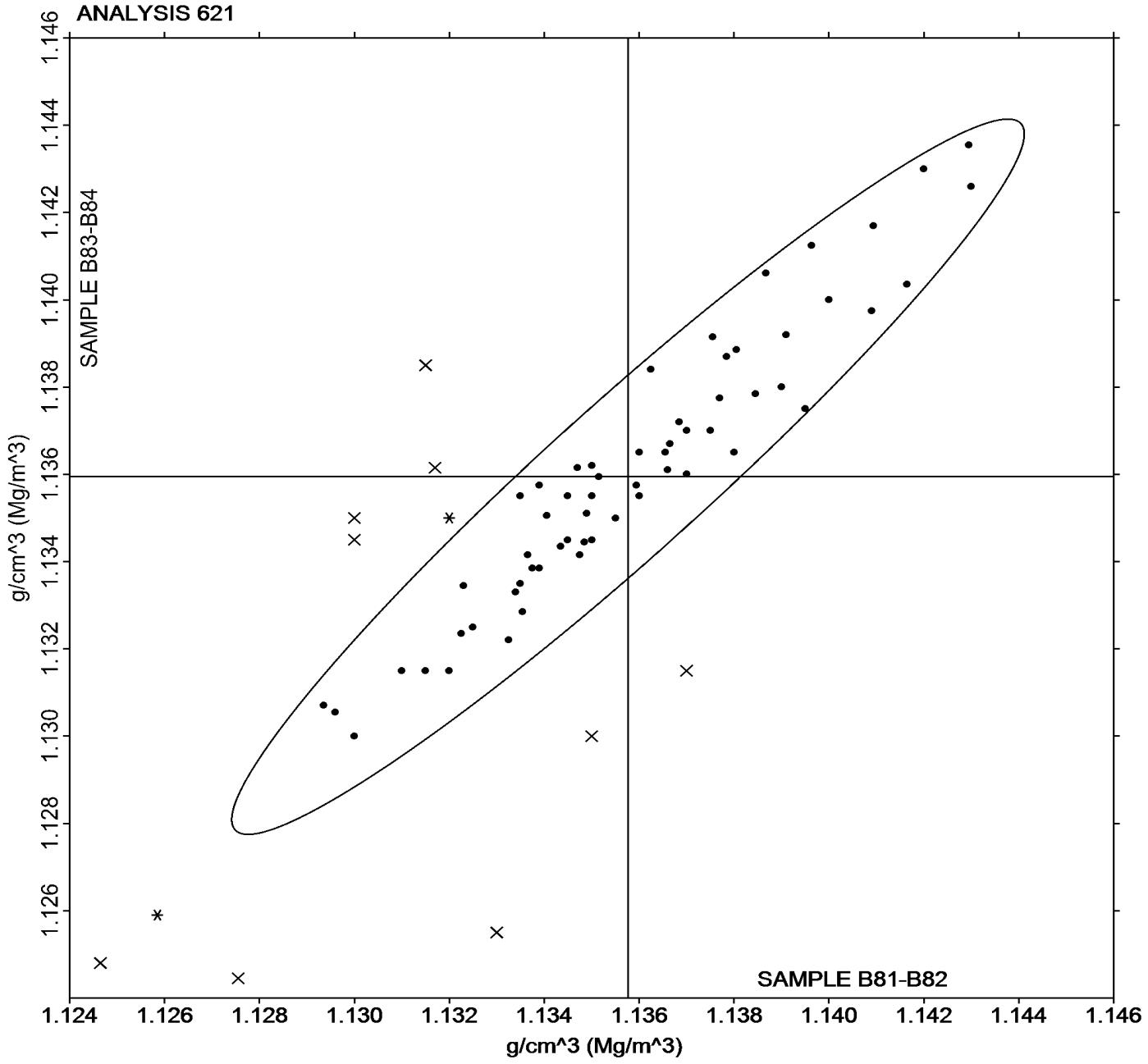
Grand Mean Sample **B81-B82** = 1.1358 g/cm^3 (Mg/m^3)

Grand Mean Sample **B83-B84** = 1.1359 g/cm^3 (Mg/m^3)



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WebCode	Data Flag	Sample HB81-HB82 Lab Mean	Diff from Grand Mean	CPV	Sample HB83-HB84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		75.00	1.40	0.64	84.00	1.51	0.72	BT
2NJFJB		75.00	1.40	0.64	82.50	0.01	0.00	XX
6EKBHX		69.85	-3.75	-1.72	80.90	-1.59	-0.76	BT
7G7FQV		70.85	-2.75	-1.26	81.45	-1.04	-0.50	BT
96NCJM		73.55	-0.05	-0.02	83.30	0.81	0.39	BT
BFCJAH		70.50	-3.10	-1.42	79.00	-3.49	-1.66	BT
J6YH4A		74.00	0.40	0.18	82.50	0.01	0.00	XX
JB9MXU		74.30	0.70	0.32	84.35	1.86	0.89	BT
MEFCM8		70.95	-2.65	-1.22	78.85	-3.64	-1.73	BT
NC98V6		76.50	2.90	1.33	84.00	1.51	0.72	BT
QY7V6V		75.50	1.90	0.87	85.50	3.01	1.43	BT
RJBUQ2		76.30	2.70	1.24	84.75	2.26	1.08	HH
VRU9KG		74.50	0.90	0.41	82.50	0.01	0.00	BT
Y7JJJV		75.00	1.40	0.64	84.00	1.51	0.72	XX
YTGCVX		72.25	-1.35	-0.62	79.75	-2.74	-1.31	BT

Summary Statistics

	Sample HB81-HB82	Sample HB83-HB84
Grand Means	73.603 Type D	82.490 Type D
Stnd Dev Btwn Labs	2.183 Type D	2.099 Type D

Statistics based on 15 of 15 reporting participants

Samples HB81-HB82: Hardness Disc, batch #1 & HB83-HB84: Hardness Disc, batch #2

Key to Instrument Codes Reported by Participants

BT	Benchtop	HH	Handheld
XX	Specify Benchtop or Handheld Instrument		

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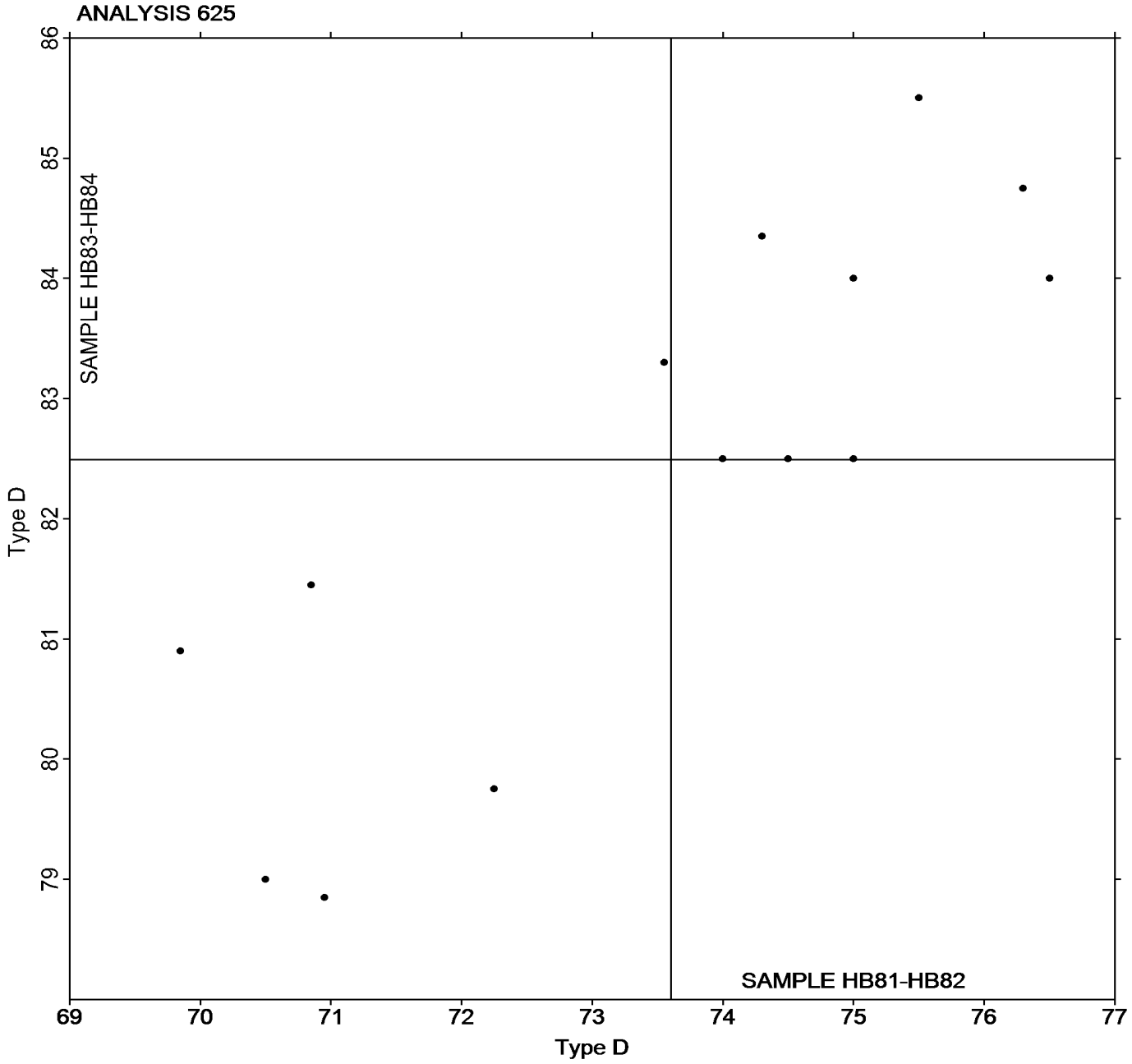
Grand Mean Sample **HB81-HB82** = 73.603 Type D

Grand Mean Sample **HB83-HB84** = 82.490 Type D



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
27WPVQ		3,577.2	110.1	0.83	3,270.5	148.0	0.92
29YTKR		3,314.1	-152.9	-1.15	3,060.3	-62.2	-0.39
3ATXER		3,515.0	47.9	0.36	3,138.0	15.5	0.10
4JXV9M		3,564.3	97.3	0.73	3,243.1	120.6	0.75
772QTL		3,629.2	162.1	1.22	3,020.9	-101.6	-0.63
8UM3B8		3,504.0	36.9	0.28	3,201.4	78.9	0.49
8YTW4H		3,337.3	-129.7	-0.98	3,031.3	-91.2	-0.56
9ENFHK		3,551.5	84.4	0.63	3,186.0	63.5	0.39
AFXCQ2		3,613.6	146.5	1.10	3,452.8	330.3	2.05
BA8JUR		3,463.5	-3.6	-0.03	3,238.0	115.5	0.72
BBW9WE		3,516.2	49.1	0.37	3,055.5	-67.0	-0.41
BHMXYH	*	3,145.9	-321.2	-2.41	2,805.1	-317.4	-1.97
C98AA4		3,617.5	150.4	1.13	3,106.5	-16.0	-0.10
CK3FCE		3,308.0	-159.1	-1.20	3,315.0	192.5	1.19
DJJYLD		3,487.2	20.1	0.15	3,114.0	-8.5	-0.05
DYX6YX	X	3,464.8	-2.3	-0.02	2,370.9	-751.6	-4.66
EJZY9L		3,354.8	-112.3	-0.84	2,942.8	-179.7	-1.11
F8PQ8E		3,406.5	-60.6	-0.46	3,308.8	186.3	1.15
G8JW2D		3,472.0	4.9	0.04	3,281.0	158.5	0.98
HAJWB6		3,288.0	-179.1	-1.35	3,118.5	-4.0	-0.02
JZR2NU		3,563.5	96.4	0.73	3,024.5	-98.0	-0.61
K8BT3J		3,333.0	-134.1	-1.01	3,124.0	1.5	0.01
K9W94U	*	3,234.5	-232.6	-1.75	2,649.5	-473.0	-2.93
KL72F7		3,759.5	292.4	2.20	3,372.2	249.7	1.55
LWAPDF		3,611.5	144.4	1.09	3,140.1	17.6	0.11
NP263F		3,402.0	-65.1	-0.49	3,196.5	74.0	0.46
PBEFJ4	X	3,211.9	-255.2	-1.92	2,066.8	-1,055.7	-6.54
PW8Y73		3,393.4	-73.6	-0.55	3,008.2	-114.3	-0.71
Q7AUNX		3,540.5	73.4	0.55	2,949.5	-173.0	-1.07
QXLDF3		3,416.1	-51.0	-0.38	2,978.4	-144.1	-0.89
TYMN6W		3,633.9	166.8	1.25	3,121.1	-1.4	-0.01
UP94CJ		3,482.5	15.4	0.12	3,213.0	90.5	0.56
UW9Q2Y		3,540.5	73.4	0.55	3,321.4	198.9	1.23
WVVQ4V		3,314.0	-153.1	-1.15	3,252.5	130.0	0.81
XN8DUU		3,634.5	167.4	1.26	2,961.5	-161.0	-1.00
Z2UQB8		3,452.5	-14.6	-0.11	3,103.5	-19.0	-0.12
Z3HVGE		3,393.3	-73.8	-0.55	3,149.6	27.1	0.17
ZYLGHB		3,443.5	-23.6	-0.18	2,955.0	-167.5	-1.04

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Summary Statistics		
Grand Means	3,467.07 psi	3,122.49 psi
Stnd Dev Btwn Labs	133.01 psi	161.38 psi
		Statistics based on 36 of 38 reporting participants

Summary Statistics in SI Units		
Grand Means	23.904 MPa	21.53 MPa
Stnd Dev Btwn Labs	0.917 MPa	1.11 MPa
		Statistics based on 36 of 38 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & K81-K82: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #630

DYX6YX (X) - Inconsistent in testing between samples. Data for sample group K81-K82 are low.

PBEFJ4 (X) - Data for sample group K81-K82 are low.

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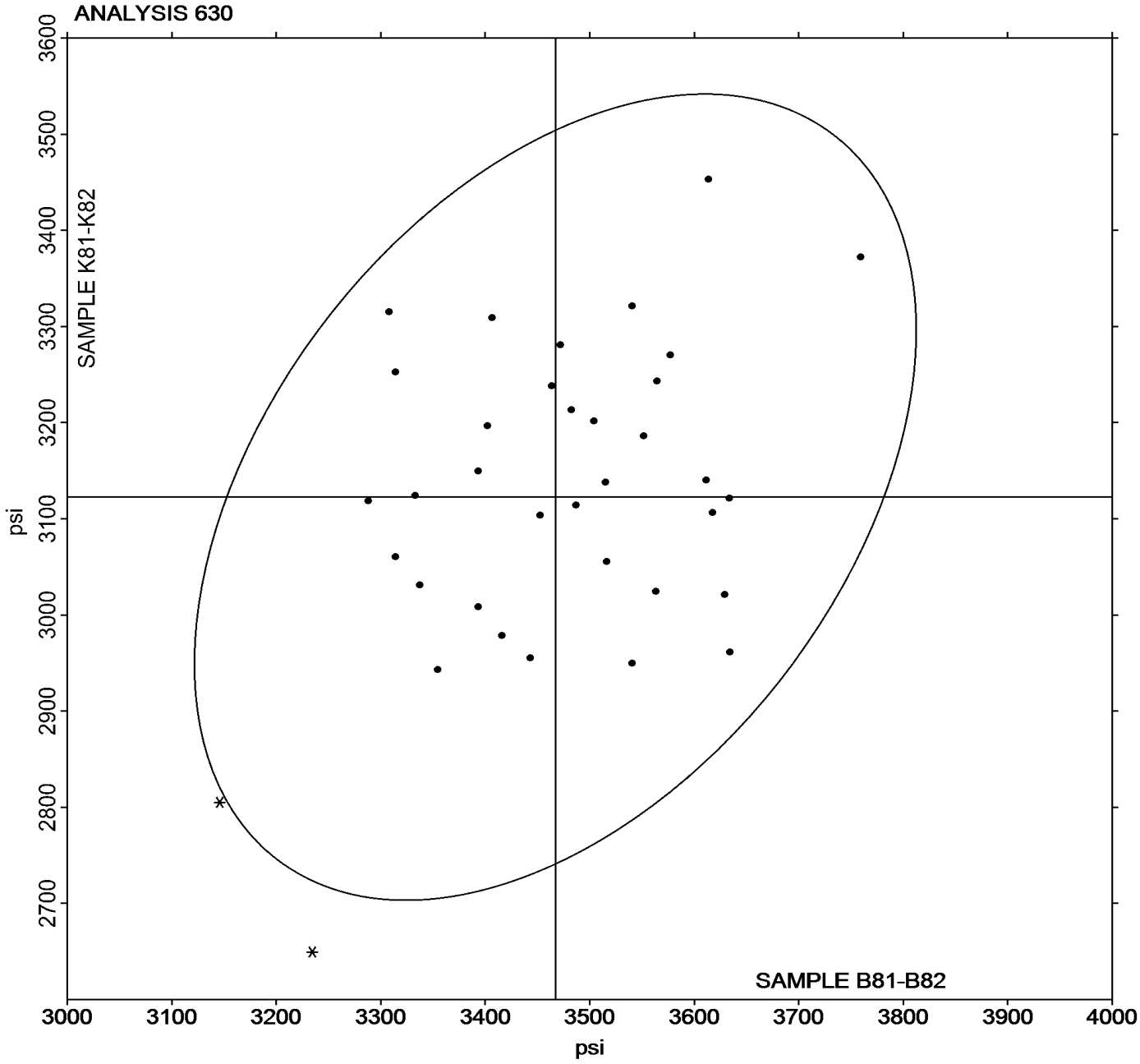
Tensile Strength: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **B81-B82** = 3,467.07 psi

Grand Mean Sample **K81-K82** = 3,122.49 psi



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Ultimate Elongation: Precured vs. Lab-Cured Samples (percent)

WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
27WPVQ		585.8	-9.8	-0.42	571.0	-8.0	-0.29
29YTKR		578.7	-16.9	-0.72	574.0	-5.0	-0.18
3ATXER		547.0	-48.6	-2.07	516.5	-62.5	-2.29
4JXV9M		570.0	-25.6	-1.09	558.0	-21.0	-0.77
772QTL	*	627.7	32.1	1.37	556.3	-22.7	-0.83
8UM3B8		590.6	-5.0	-0.21	572.7	-6.3	-0.23
8YTW4H		564.5	-31.1	-1.32	549.5	-29.5	-1.08
9ENFHK		593.5	-2.1	-0.09	574.4	-4.6	-0.17
AFXCQ2		584.0	-11.6	-0.50	593.7	14.7	0.54
BA8JUR		598.5	2.9	0.12	585.5	6.5	0.24
BBW9WE		625.0	29.4	1.25	590.5	11.5	0.42
BHMXYH		612.0	16.4	0.70	612.5	33.5	1.23
C98AA4		600.5	4.9	0.21	544.0	-35.0	-1.28
CK3FCE		629.5	33.9	1.45	638.0	59.0	2.16
DJJYLD	*	632.6	37.0	1.58	650.0	71.0	2.60
DYX6YX		616.6	21.0	0.89	570.6	-8.4	-0.31
EJZY9L	X	370.9	-224.7	-9.57	358.7	-220.3	-8.06
F8PQ8E		588.1	-7.5	-0.32	606.2	27.3	1.00
G8JW2D		602.5	6.9	0.29	600.5	21.5	0.79
HAJWB6		595.0	-0.6	-0.02	587.0	8.0	0.29
JZR2NU		608.0	12.4	0.53	591.5	12.5	0.46
K8BT3J		567.5	-28.1	-1.20	564.0	-15.0	-0.55
K9W94U		562.0	-33.6	-1.43	559.5	-19.5	-0.71
KL72F7		606.0	10.4	0.44	598.7	19.7	0.72
LWAPDF		633.3	37.7	1.61	601.9	22.9	0.84
NP263F		570.0	-25.6	-1.09	551.5	-27.5	-1.01
PBEFJ4		565.6	-30.0	-1.28	554.5	-24.5	-0.90
PW8Y73		606.1	10.5	0.45	551.9	-27.1	-0.99
Q7AUNX		583.0	-12.6	-0.54	580.5	1.5	0.06
QXLDF3		591.5	-4.1	-0.17	559.0	-20.0	-0.73
TYMN6W		613.6	18.1	0.77	591.5	12.6	0.46
UP94CJ		592.5	-3.1	-0.13	579.0	0.0	0.00
UW9Q2Y		646.5	50.9	2.17	615.5	36.5	1.34
WVVQ4V		581.5	-14.1	-0.60	558.5	-20.5	-0.75
XN8DUU		622.5	26.9	1.15	614.5	35.5	1.30
Z2UQB8		573.5	-22.1	-0.94	546.0	-33.0	-1.21
Z3HVGE		580.0	-15.6	-0.66	577.5	-1.5	-0.05

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Ultimate Elongation: Precured vs. Lab-Cured Samples (percent)

WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
ZYLGHB		591.5	-4.1	-0.17	576.0	-3.0	-0.11

Summary Statistics

	Sample B81-B82	Sample K81-K82
Grand Means	595.58 percent	578.98 percent
Stnd Dev Btwn Labs	23.47 percent	27.34 percent

Statistics based on 37 of 38 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & K81-K82: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #631

EJZY9L (X) - Data for all Samples are low.

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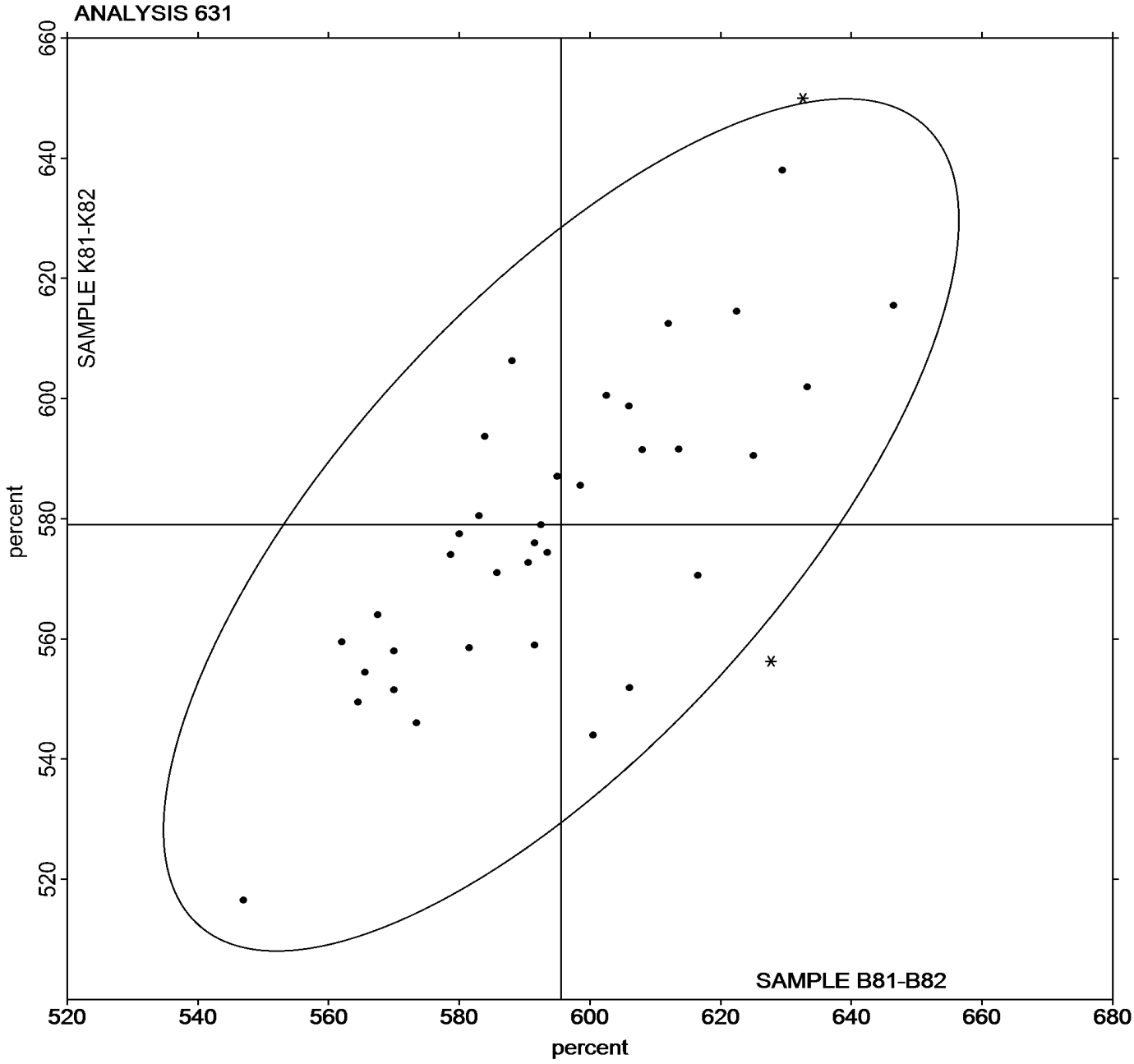
Grand Mean Sample **B81-B82** = 595.58 percent

Grand Mean Sample **K81-K82** = 578.98 percent



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Stress at 300% Elongation: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
27WPVQ		1,201.4	54.5	0.69	1,123.6	34.9	0.31
29YTKR		1,171.2	24.3	0.31	1,090.0	1.4	0.01
3ATXER	*	1,359.0	212.1	2.70	1,364.5	275.9	2.49
4JXV9M		1,177.0	30.1	0.38	1,148.7	60.1	0.54
772QTL		1,164.4	17.5	0.22	1,150.0	61.3	0.55
8UM3B8		1,171.3	24.4	0.31	1,138.8	50.1	0.45
8YTW4H		1,235.0	88.1	1.12	1,201.6	113.0	1.02
9ENFHK		1,184.5	37.6	0.48	1,122.5	33.9	0.31
AFXCQ2		1,232.6	85.7	1.09	1,098.6	10.0	0.09
BA8JUR		1,145.0	-1.9	-0.02	1,175.5	86.9	0.78
BBW9WE		1,082.6	-64.3	-0.82	986.3	-102.3	-0.92
BHMXYH	*	974.7	-172.2	-2.20	817.3	-271.3	-2.45
C98AA4		1,177.0	30.1	0.38	1,202.0	113.4	1.02
CK3FCE		972.5	-174.4	-2.22	1,019.0	-69.6	-0.63
DJJYLD		1,039.4	-107.5	-1.37	927.2	-161.4	-1.46
DYX6YX	*	1,106.8	-40.1	-0.51	815.2	-273.5	-2.47
EJZY9L	X	2,433.0	1,286.1	16.40	2,207.5	1,118.9	10.09
F8PQ8E		1,110.0	-36.9	-0.47	997.8	-90.8	-0.82
G8JW2D		1,104.5	-42.4	-0.54	1,103.5	14.9	0.13
HAJWB6		1,106.5	-40.4	-0.51	1,128.5	39.9	0.36
JZR2NU		1,204.5	57.6	0.73	1,083.5	-5.1	-0.05
K8BT3J		1,144.5	-2.4	-0.03	1,088.5	-0.1	0.00
K9W94U		1,193.5	46.6	0.59	953.0	-135.6	-1.22
KL72F7		1,214.1	67.2	0.86	1,107.5	18.9	0.17
LWAPDF		1,116.8	-30.1	-0.38	1,109.5	20.9	0.19
NP263F		1,221.0	74.1	0.94	1,254.0	165.4	1.49
PBEFJ4	X	1,149.4	2.6	0.03	704.2	-384.4	-3.47
PW8Y73		1,030.5	-116.4	-1.48	1,149.7	61.1	0.55
Q7AUNX		1,193.0	46.1	0.59	995.5	-93.1	-0.84
QXLDF3		1,204.7	57.8	0.74	1,152.7	64.0	0.58
TYMN6W		1,121.0	-25.9	-0.33	1,021.1	-67.6	-0.61
UP94CJ		1,144.0	-2.9	-0.04	1,160.0	71.4	0.64
UW9Q2Y		996.7	-150.2	-1.92	1,048.6	-40.1	-0.36
WVVQ4V		1,110.0	-36.9	-0.47	1,210.5	121.9	1.10
XN8DUU		1,167.0	20.1	0.26	971.0	-117.6	-1.06
Z2UQB8		1,196.5	49.6	0.63	1,154.0	65.4	0.59
Z3HVGE		1,191.0	44.1	0.56	1,070.0	-18.6	-0.17
ZYLGHB		1,124.0	-22.9	-0.29	1,050.5	-38.1	-0.34

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Summary Statistics		
Grand Means	1,146.89 psi	1,088.61 psi
Stnd Dev Btwn Labs	78.44 psi	110.91 psi
		Statistics based on 36 of 38 reporting participants

Summary Statistics in SI Units		
Grand Means	7.9075 MPa	7.51 MPa
Stnd Dev Btwn Labs	0.5408 MPa	0.76 MPa
		Statistics based on 36 of 38 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & K81-K82: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #632

EJZY9L (X) - Extreme Data.

PBEFJ4 (X) - Data for sample group K81-K82 are low.

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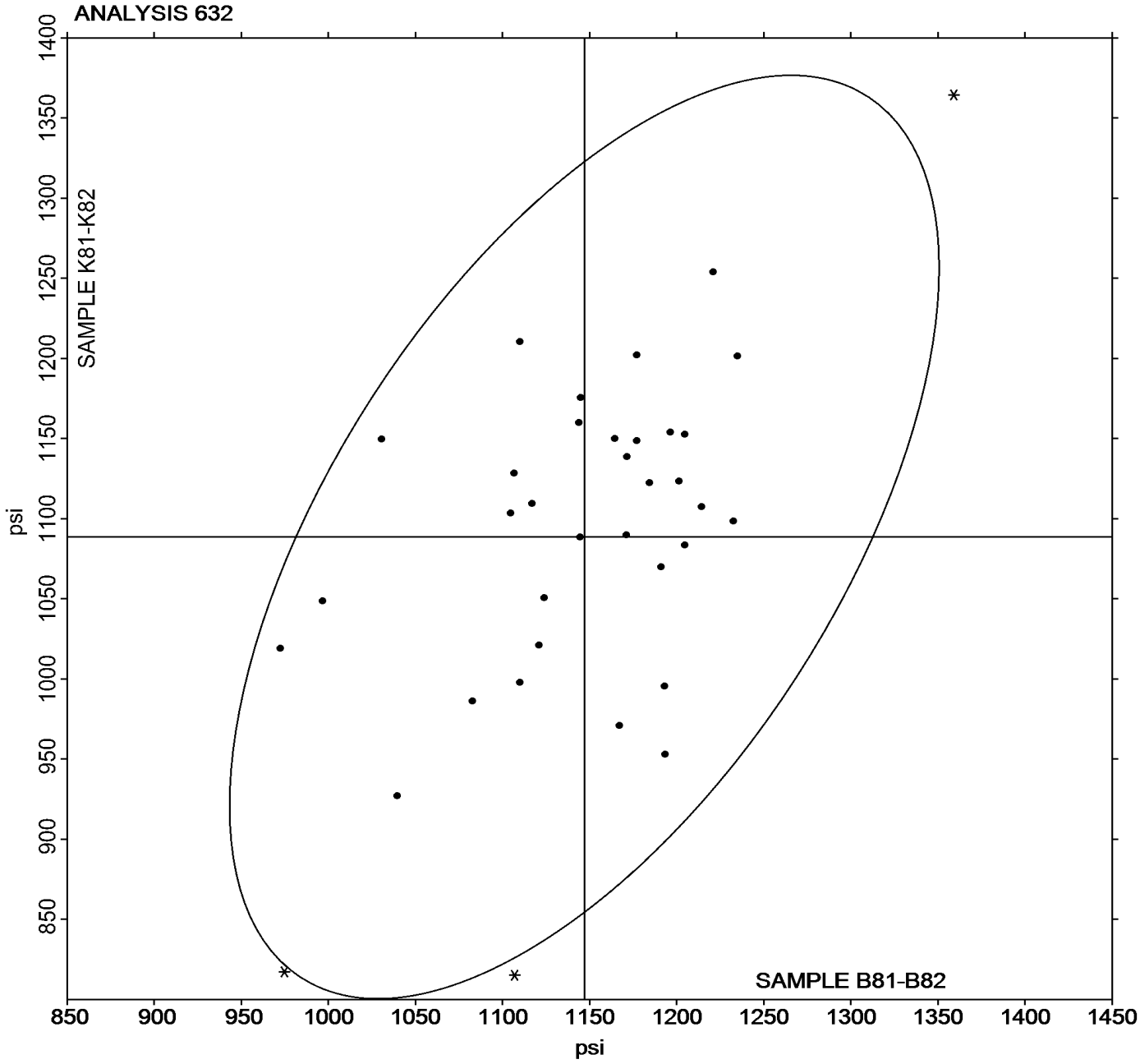
Stress at 300% Elongation: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **B81-B82** = 1,146.89 psi

Grand Mean Sample **K81-K82** = 1,088.61 psi



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Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
27WPVQ		247.3	2.2	0.17	234.6	-10.2	-0.50
29YTKR		242.9	-2.2	-0.17	241.5	-3.2	-0.16
3ATXER		262.5	17.4	1.32	266.0	21.3	1.04
4JXV9M		249.5	4.3	0.33	248.7	4.0	0.20
772QTL		249.2	4.0	0.31	246.8	2.0	0.10
8UM3B8		245.7	0.5	0.04	247.2	2.5	0.12
8YTW4H		257.4	12.3	0.94	265.4	20.7	1.01
9ENFHK		255.2	10.1	0.77	270.0	25.2	1.23
AFXCQ2		243.5	-1.7	-0.13	244.3	-0.4	-0.02
BA8JUR		249.0	3.9	0.29	274.5	29.8	1.46
BBW9WE		234.5	-10.6	-0.80	222.3	-22.4	-1.09
BHMXYH		227.0	-18.1	-1.38	202.3	-42.4	-2.07
C98AA4		249.5	4.4	0.33	258.0	13.3	0.65
CK3FCE		219.5	-25.6	-1.95	237.0	-7.7	-0.38
DJJYLD		238.9	-6.2	-0.47	229.1	-15.6	-0.76
DYX6YX	*	234.9	-10.2	-0.78	190.8	-53.9	-2.64
EJZY9L	X	475.7	230.6	17.51	440.9	196.2	9.59
F8PQ8E		235.0	-10.2	-0.77	227.3	-17.4	-0.85
G8JW2D		239.0	-6.1	-0.46	251.0	6.3	0.31
HAJWB6		236.5	-8.6	-0.65	263.5	18.8	0.92
JZR2NU		276.5	31.4	2.38	256.0	11.3	0.55
K8BT3J		246.5	1.4	0.10	248.0	3.3	0.16
K9W94U		255.5	10.4	0.79	204.0	-40.7	-1.99
KL72F7		254.7	9.6	0.73	246.8	2.0	0.10
LWAPDF		246.6	1.4	0.11	253.8	9.1	0.44
NP263F		257.0	11.9	0.90	265.5	20.8	1.02
PBEFJ4	X	257.8	12.7	0.96	174.5	-70.2	-3.43
PW8Y73		217.0	-28.1	-2.13	249.5	4.8	0.24
Q7AUNX		244.5	-0.6	-0.05	224.5	-20.2	-0.99
QXLDF3		274.9	29.8	2.26	283.0	38.3	1.87
TYMN6W		243.1	-2.1	-0.16	239.6	-5.1	-0.25
UP94CJ		231.0	-14.1	-1.07	256.5	11.8	0.58
UW9Q2Y		224.7	-20.5	-1.55	247.8	3.0	0.15
WVVQ4V		233.0	-12.1	-0.92	269.0	24.3	1.19
XN8DUU		248.0	2.9	0.22	218.0	-26.7	-1.31
Z2UQB8		250.0	4.9	0.37	245.0	0.3	0.01
Z3HVGE		258.0	12.9	0.98	239.5	-5.2	-0.25

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Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)

WebCode	Data Flag	Sample B81-B82 Lab Mean	Sample B81-B82 Diff from Grand Mean	Sample B81-B82 CPV	Sample K81-K82 Lab Mean	Sample K81-K82 Diff from Grand Mean	Sample K81-K82 CPV
ZYLGHB		246.5	1.4	0.10	243.0	-1.7	-0.08

Summary Statistics

	Sample B81-B82	Sample K81-K82
Grand Means	245.12 psi	244.71 psi
Stnd Dev Btwn Labs	13.17 psi	20.46 psi

Statistics based on 36 of 38 reporting participants

Summary Statistics in SI Units

	Sample B81-B82	Sample K81-K82
Grand Means	1.6900 MPa	1.69 MPa
Stnd Dev Btwn Labs	0.0908 MPa	0.14 MPa

Statistics based on 36 of 38 reporting participants

Samples B81-B82: Polyisoprene compound, batch #1 & K81-K82: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #633

EJZY9L (X) - Extreme Data.

PBEFJ4 (X) - Data for sample group K81-K82 are low.

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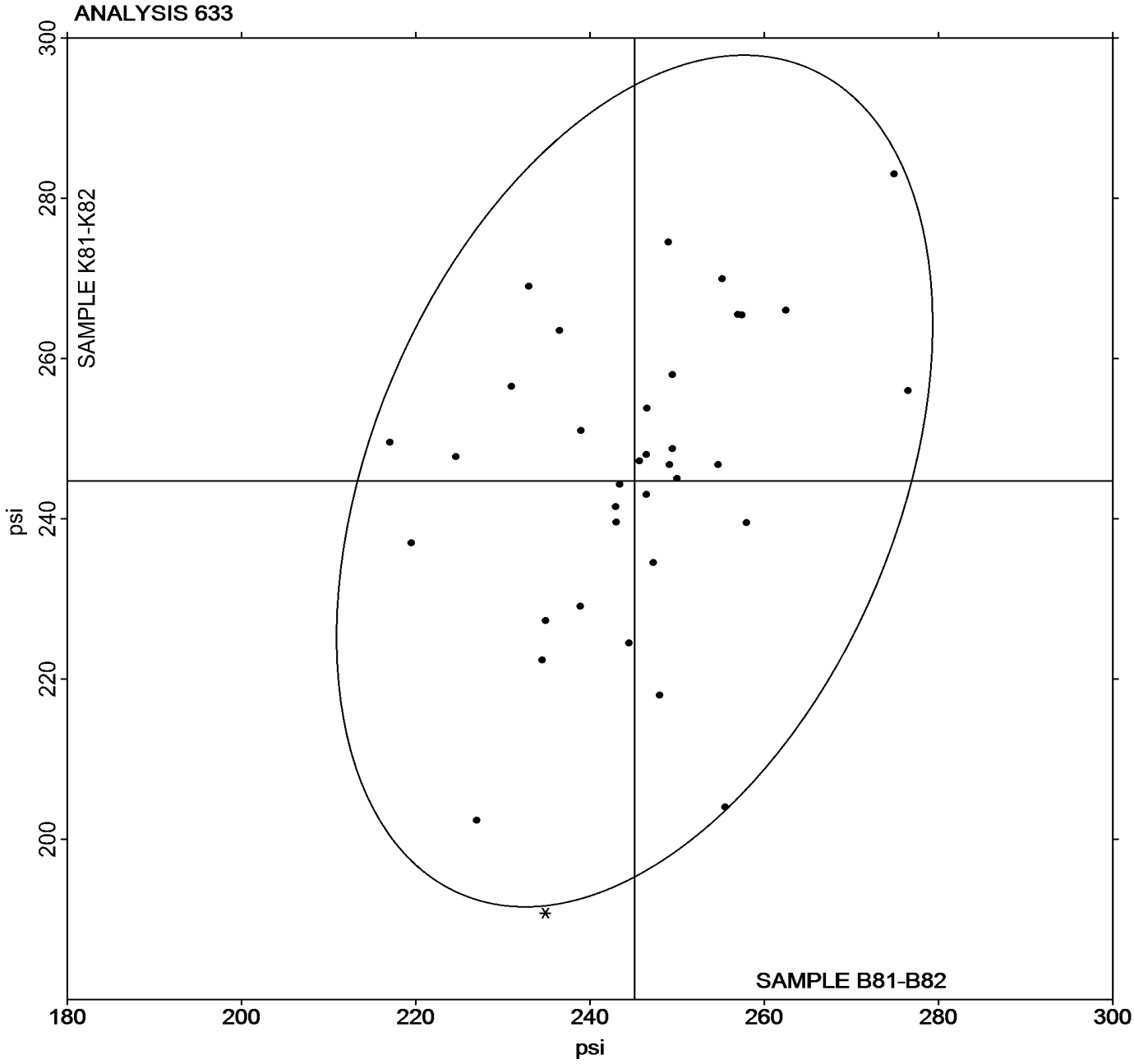
Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)

Grand Mean Sample **B81-B82** = 245.12 psi

Grand Mean Sample **K81-K82** = 244.71 psi



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Mooney Viscosity: 4-minute readings (ML 1 + 4)

WebCode	Data Flag	Sample T81-T82 Lab Mean	Diff from Grand Mean	CPV	Sample T83-T84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		49.20	-0.65	-0.46	52.92	-0.02	-0.02	MR
36JH8N		49.37	-0.49	-0.34	53.23	0.30	0.29	MR
4JXV9M		49.91	0.06	0.04	52.74	-0.20	-0.19	MV
4Q2EP6	X	46.45	-3.40	-2.37	53.60	0.67	0.64	MR
7KDEVN		50.70	0.85	0.59	53.84	0.91	0.88	MR
8YTW4H		50.57	0.71	0.50	53.67	0.73	0.71	MR
9ENFHK		50.01	0.15	0.10	53.77	0.83	0.80	TA
AFXCQ2		50.33	0.48	0.33	53.03	0.10	0.10	MR
BBW9WE		50.50	0.64	0.45	54.12	1.19	1.14	MR
BHMXYH		50.92	1.07	0.74	52.99	0.05	0.05	MV
CK3FCE		47.52	-2.33	-1.63	52.15	-0.78	-0.75	MR
DJJYLD		50.33	0.48	0.33	53.27	0.33	0.32	MR
DYX6YX		50.77	0.92	0.64	53.72	0.79	0.76	TV
E9DBA8		49.50	-0.35	-0.25	52.25	-0.68	-0.66	MR
EJZY9L		47.51	-2.34	-1.63	50.77	-2.16	-2.08	MV
ETMLXB		51.17	1.31	0.91	53.22	0.28	0.27	MR
F8PQ8E		46.41	-3.44	-2.40	50.71	-2.22	-2.13	MV
G8JW2D		48.87	-0.99	-0.69	53.51	0.57	0.55	MV
GV4E3A		50.63	0.77	0.54	52.51	-0.42	-0.41	MV
GWJUGC	*	48.65	-1.20	-0.84	54.17	1.23	1.19	MR
HAJWB6		49.35	-0.50	-0.35	52.23	-0.70	-0.67	MR
JNVNXA		50.75	0.90	0.62	53.08	0.15	0.14	MR
K8BT3J		49.70	-0.15	-0.11	52.72	-0.22	-0.21	MR
KL72F7		50.66	0.80	0.56	52.50	-0.44	-0.42	MR
MEMQMS		48.58	-1.27	-0.89	51.55	-1.38	-1.33	MR
NP263F		50.40	0.55	0.38	52.38	-0.55	-0.53	MR
NWQL3Y	*	45.56	-4.29	-2.99	50.74	-2.19	-2.11	XX
NY4NF4	M	47.15	-2.70	-1.88	No data reported for this sample			MR
PBEFJ4	M	51.81	1.95	1.36	No data reported for this sample			MR
QPPFQE		51.85	1.99	1.39	54.14	1.21	1.16	TA
QXLDF3	M	46.58	-3.27	-2.28	No data reported for this sample			MV
RNEX89		50.45	0.60	0.41	53.75	0.82	0.79	MR
UMALJY		49.57	-0.29	-0.20	51.70	-1.23	-1.19	MR
WE4X9V		52.77	2.91	2.03	55.42	2.48	2.39	MR
WVNNAC		50.05	0.20	0.14	53.35	0.42	0.40	MR
WVVQ4V		50.97	1.11	0.77	53.20	0.27	0.26	MR
Z3HVGE		50.97	1.11	0.77	53.57	0.63	0.61	MR
Z7LTGT		50.27	0.41	0.29	53.72	0.78	0.75	MR

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WebCode	Data Flag	Sample T81-T82 Lab Mean	Diff from Grand Mean	CPV	Sample T83-T84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
ZYLGHB		50.18	0.33	0.23	52.05	-0.89	-0.85	ML

Summary Statistics

	Sample T81-T82	Sample T83-T84
Grand Means	49.855 ML 1 + 4	52.933 ML 1 + 4
Stnd Dev Btwn Labs	1.436 ML 1 + 4	1.040 ML 1 + 4

Statistics based on 35 of 39 reporting participants

Samples T81-T82: SBR & T83-T84: Butyl

Comments on Assigned Data Flags for Test #660

4Q2EP6 (X) - Inconsistent in testing between samples.

NY4NF4 (M) - Participant did not submit data for sample group T83-T84.

PBEFJ4 (M) - Participant did not submit data for sample group T83-T84.

QXLDF3 (M) - Participant did not submit data for sample group T83-T84.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	TA	TA Instruments (any model)
TV	Tech Pro Visc Tech (any model)	XX	Instrument make/model not specified by lab

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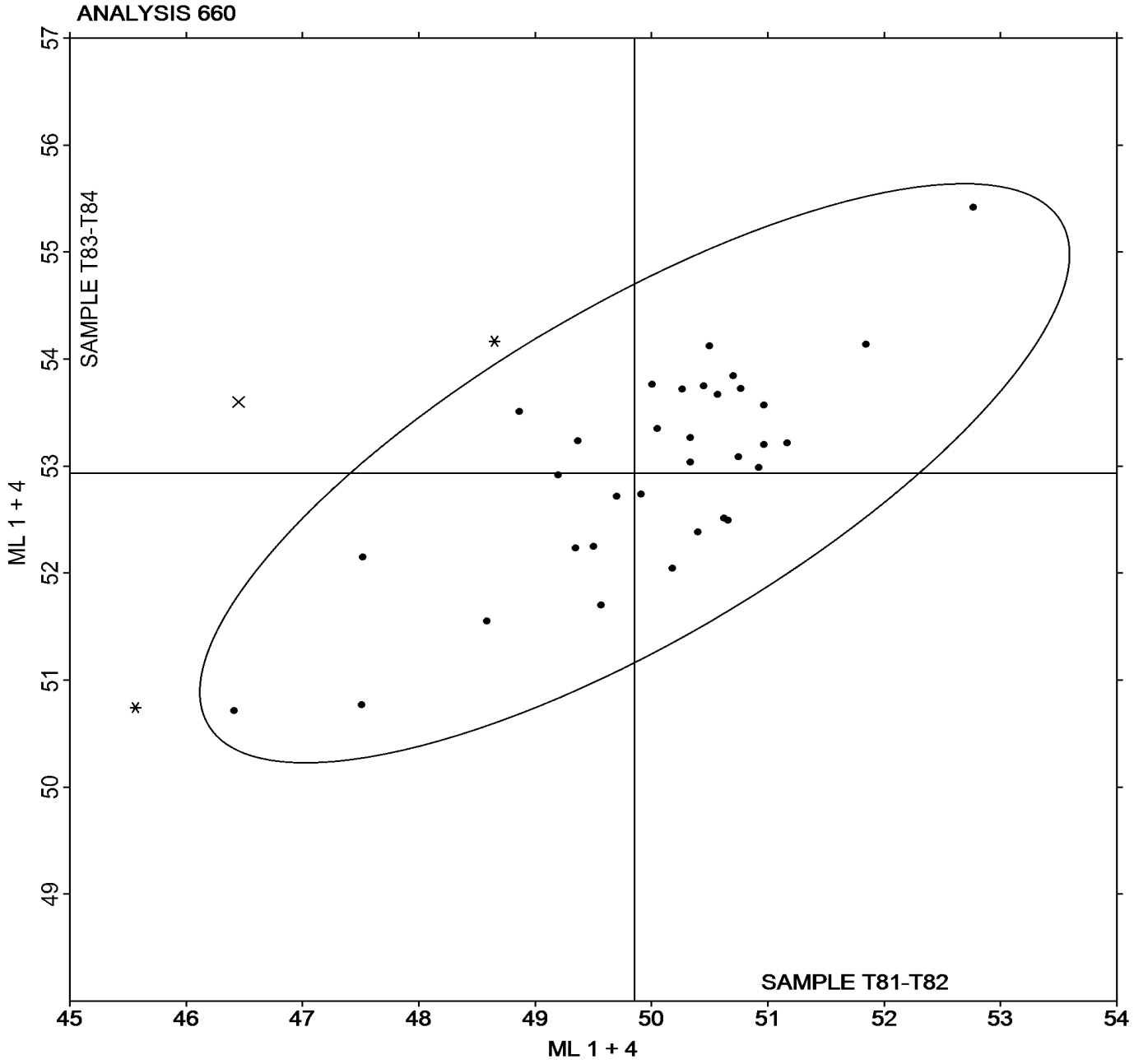
Grand Mean Sample **T81-T82** = 49.855 ML 1 + 4

Grand Mean Sample **T83-T84** = 52.933 ML 1 + 4



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Mooney Viscosity: 4-min NBR/SBR & 8-min butyl readings (ML)

WebCode	Data Flag	Sample T81-T82 Lab Mean	Diff from Grand Mean	CPV	Sample T83-T84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		49.20	-0.69	-0.52	50.55	0.12	0.11	MR
36JH8N		49.37	-0.53	-0.40	50.05	-0.38	-0.35	MR
4JXV9M		49.91	0.02	0.01	49.91	-0.52	-0.49	MV
4Q2EP6	X	46.45	-3.44	-2.58	51.30	0.87	0.81	MR
7KDEVN		50.70	0.81	0.60	51.65	1.22	1.14	MR
8YTW4H		50.57	0.67	0.50	51.03	0.60	0.56	MR
9ENFHK		50.01	0.11	0.08	51.91	1.48	1.38	TA
AFXCQ2		50.33	0.44	0.33	51.88	1.45	1.35	MR
BBW9WE		50.50	0.60	0.45	51.25	0.82	0.76	MR
BHMXYH		50.92	1.03	0.77	50.98	0.55	0.51	MV
CK3FCE		47.52	-2.37	-1.78	49.39	-1.04	-0.97	MR
DJJYLD		50.33	0.44	0.33	51.00	0.57	0.53	MR
DYX6YX		50.77	0.88	0.66	50.49	0.06	0.05	TV
E9DBA8		49.50	-0.39	-0.30	50.60	0.17	0.16	MR
EJZY9L		47.51	-2.38	-1.79	48.27	-2.16	-2.01	MV
ETMLXB		51.17	1.27	0.95	50.55	0.12	0.11	MR
F8PQ8E	*	46.41	-3.48	-2.61	48.91	-1.52	-1.41	MV
G8JW2D		48.87	-1.03	-0.77	51.22	0.79	0.74	MV
GV4E3A		50.63	0.73	0.55	50.82	0.39	0.37	MV
GWJUGC		48.65	-1.24	-0.93	51.25	0.82	0.76	MR
HAJWB6		49.35	-0.54	-0.41	50.07	-0.36	-0.34	MR
JNVNXA		50.75	0.86	0.64	50.02	-0.41	-0.38	MR
K8BT3J		49.70	-0.19	-0.15	50.20	-0.23	-0.21	MR
KL72F7		50.66	0.76	0.57	49.69	-0.74	-0.69	MR
MEMQM9		48.58	-1.31	-0.98	49.23	-1.20	-1.11	MR
NP263F		50.40	0.51	0.38	49.43	-1.00	-0.93	MR
NY4NF4		47.15	-2.74	-2.06	48.45	-1.98	-1.84	MR
PBEFJ4		51.81	1.91	1.43	51.33	0.90	0.84	MR
QXLDF3	X	46.58	-3.31	-2.48	53.06	2.63	2.45	MV
RNEX89		50.45	0.56	0.42	51.25	0.82	0.76	MR
UMALJY		49.57	-0.33	-0.25	49.43	-1.00	-0.93	MR
WE4X9V		52.77	2.87	2.15	52.92	2.49	2.31	MR
WVVQ4V		50.97	1.07	0.80	50.20	-0.23	-0.21	MP
Z3HVGE		50.97	1.07	0.80	51.07	0.64	0.59	MR
Z7LTGT		50.27	0.37	0.28	51.12	0.69	0.64	MR
ZYLGHB		50.18	0.29	0.21	48.47	-1.96	-1.82	ML

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Summary Statistics		
Grand Means	49.895 ML 1 + 8	50.429 ML 1 + 8
Stnd Dev Btwn Labs	1.335 ML 1 + 8	1.075 ML 1 + 8

Statistics based on 34 of 36 reporting participants

Samples T81-T82: SBR & T83-T84: Butyl

Comments on Assigned Data Flags for Test #661

4Q2EP6 (X) - Inconsistent in testing between samples.

QXLDF3 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group T83-T84.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MP	Monsanto Compact Mooney Viscometer
MR	Alpha Technologies Model MV2000/MV2000E	MV	Montech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)

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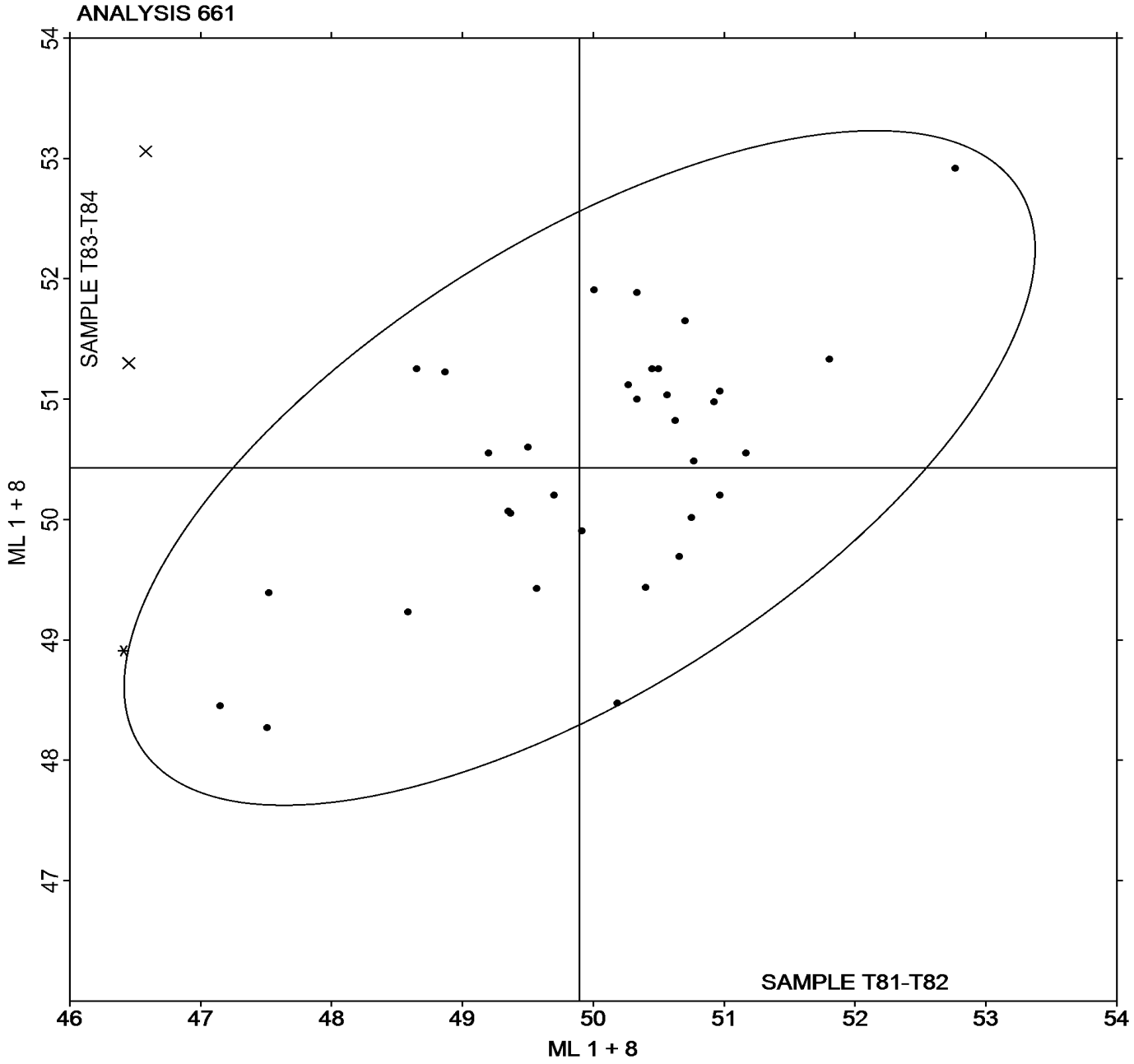
Mooney Viscosity: 4-min NBR/SBR & 8-min butyl readings (ML)

Grand Mean Sample **T81-T82** = 49.895 ML 1 + 8

Grand Mean Sample **T83-T84** = 50.429 ML 1 + 8



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WebCode	Data Flag	Sample T81-T82 Lab Mean	Diff from Grand Mean	CPV	Sample T83-T84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		5.470	0.308	0.17	7.710	0.060	0.04	MR
4JXV9M		5.052	-0.110	-0.06	5.110	-2.540	-1.62	MV
8YTW4H		4.925	-0.237	-0.13	7.917	0.267	0.17	MR
9ENFHK		5.062	-0.100	-0.06	5.123	-2.527	-1.61	TA
BHMXYH		3.600	-1.562	-0.86	6.600	-1.050	-0.67	MV
CK3FCE	X	24.792	19.630	10.79	9.627	1.977	1.26	MR
DJJYLD		4.360	-0.802	-0.44	7.217	-0.433	-0.28	MR
DYX6YX	*	11.060	5.898	3.24	11.120	3.470	2.21	TV
EJZY9L	X	303.033	297.871	163.77	544.933	537.283	342.19	MV
F8PQ8E	X	543.833	538.671	296.17	547.267	539.617	343.68	MV
G8JW2D		4.400	-0.762	-0.42	7.200	-0.450	-0.29	MV
JNVNXA		4.567	-0.595	-0.33	7.133	-0.517	-0.33	MR
K8BT3J		4.593	-0.569	-0.31	7.127	-0.523	-0.33	MR
MEMQMS		4.312	-0.850	-0.47	6.697	-0.953	-0.61	MR
NP263F		4.892	-0.270	-0.15	7.130	-0.520	-0.33	MR
PBEFJ4		5.035	-0.127	-0.07	7.497	-0.153	-0.10	MR
QPPFQE		4.033	-1.129	-0.62	8.367	0.717	0.46	TA
QXLDF3	*	4.833	-0.329	-0.18	11.333	3.683	2.35	MV
RNEX89		3.700	-1.462	-0.80	7.467	-0.183	-0.12	MR
WVNNAC		4.300	-0.862	-0.47	7.800	0.150	0.10	MR
Z3HVGE		4.840	-0.322	-0.18	7.723	0.073	0.05	MR
Z7LTGT		9.043	3.881	2.13	9.080	1.430	0.91	MR

Summary Statistics

	Sample T81-T82	Sample T83-T84
Grand Means	5.1619 seconds	7.6500 seconds
Stnd Dev Btwn Labs	1.8188 seconds	1.5701 seconds

Statistics based on 19 of 22 reporting participants

Samples T81-T82: SBR & T83-T84: Butyl

Comments on Assigned Data Flags for Test #662

CK3FCE (X) - Data for sample group T81-T82 are very high.

EJZY9L (X) - Extreme Data.

F8PQ8E (X) - Extreme Data.

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Key to Instrument Codes Reported by Participants

MR	Alpha Technologies Model MV2000/MV2000E	MV	MonTech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)

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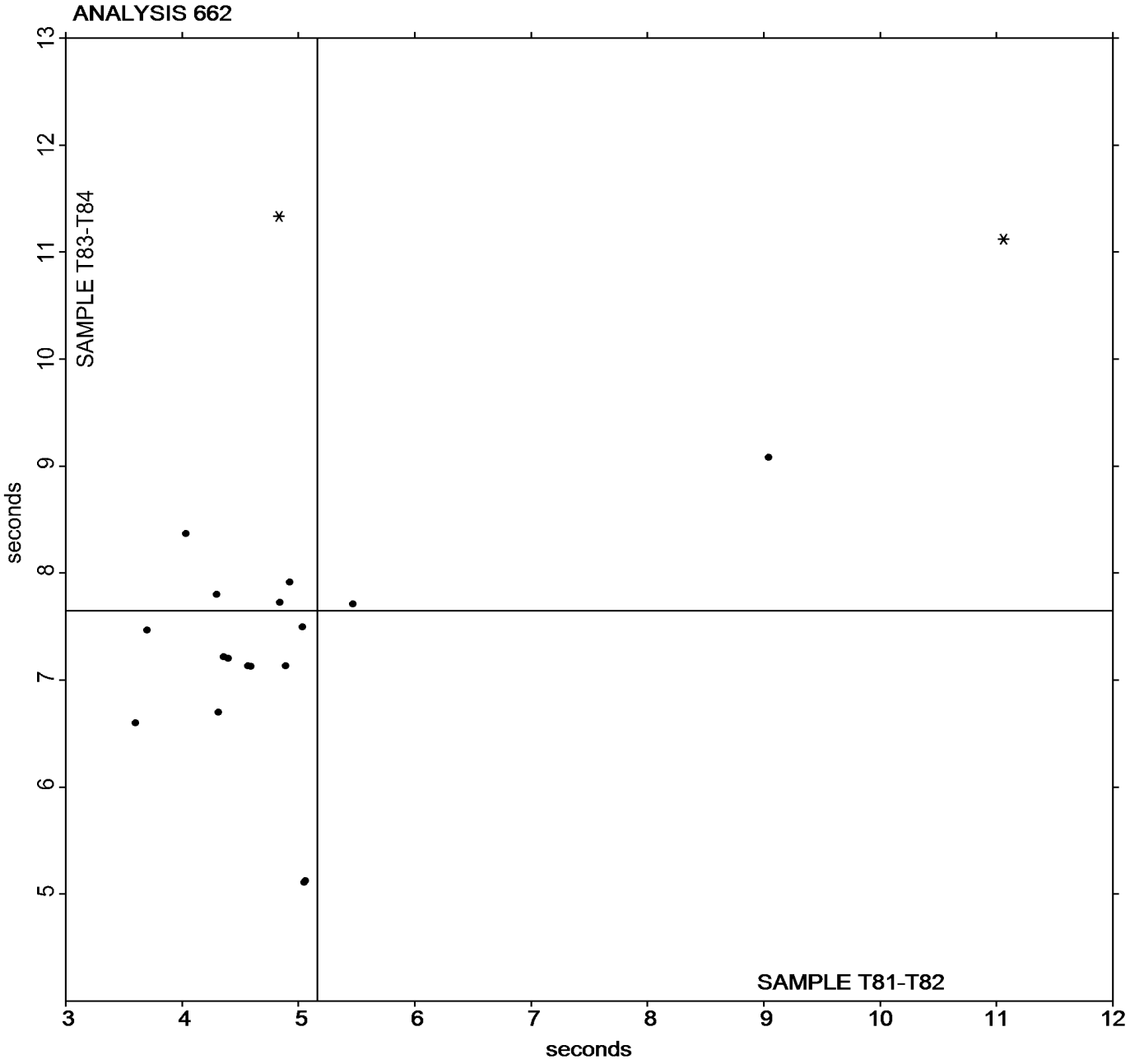
Grand Mean Sample **T81-T82** = 5.1619 seconds

Grand Mean Sample **T83-T84** = 7.6500 seconds



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample T81-T82 Lab Mean	Diff from Grand Mean	CPV	Sample T83-T84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		91.13	-0.43	-0.12	91.95	0.01	0.00	MR
4JXV9M		94.96	3.40	0.96	94.45	2.50	1.13	MV
8YTW4H		90.60	-0.95	-0.27	91.07	-0.87	-0.40	MR
9ENFHK		94.70	3.14	0.89	93.71	1.76	0.80	TA
BHMXYH		94.00	2.44	0.69	94.00	2.05	0.93	MV
CK3FCE	*	81.83	-9.73	-2.75	91.11	-0.84	-0.38	MR
DJJYLD		92.32	0.76	0.21	92.48	0.54	0.24	MR
DYX6YX		93.16	1.60	0.45	92.14	0.19	0.09	TV
EJZY9L		95.87	4.31	1.22	96.94	4.99	2.27	MV
F8PQ8E		92.74	1.18	0.33	92.00	0.06	0.03	MV
G8JW2D		92.16	0.61	0.17	92.29	0.34	0.15	MV
JNVNXA		91.95	0.39	0.11	92.57	0.62	0.28	MR
K8BT3J		91.72	0.16	0.05	92.18	0.24	0.11	MR
MEMQM9		92.59	1.03	0.29	93.47	1.53	0.69	MR
NP263F		91.43	-0.12	-0.04	92.41	0.47	0.21	MR
PBEFJ4		82.09	-9.47	-2.67	89.36	-2.59	-1.18	MR
QPPFQE		94.10	2.55	0.72	92.50	0.55	0.25	TA
QXLDF3		91.81	0.25	0.07	87.21	-4.73	-2.15	MV
RNEX89		92.92	1.36	0.38	91.93	-0.01	-0.01	MR
Z3HVGE		91.24	-0.32	-0.09	89.31	-2.64	-1.20	MR
Z7LTGT		89.39	-2.17	-0.61	87.80	-4.15	-1.89	MR

Summary Statistics

	Sample T81-T82	Sample T83-T84
Grand Means	91.556 percent	91.946 percent
Stnd Dev Btwn Labs	3.541 percent	2.202 percent

Statistics based on 21 of 21 reporting participants

Samples T81-T82: SBR & T83-T84: Butyl

Key to Instrument Codes Reported by Participants

MR	Alpha Technologies Model MV2000/MV2000E	MV	Montech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)

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Key to Instrument Codes Reported by Participants

MR	Alpha Technologies Model MV2000/MV2000E	MV	Montech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)

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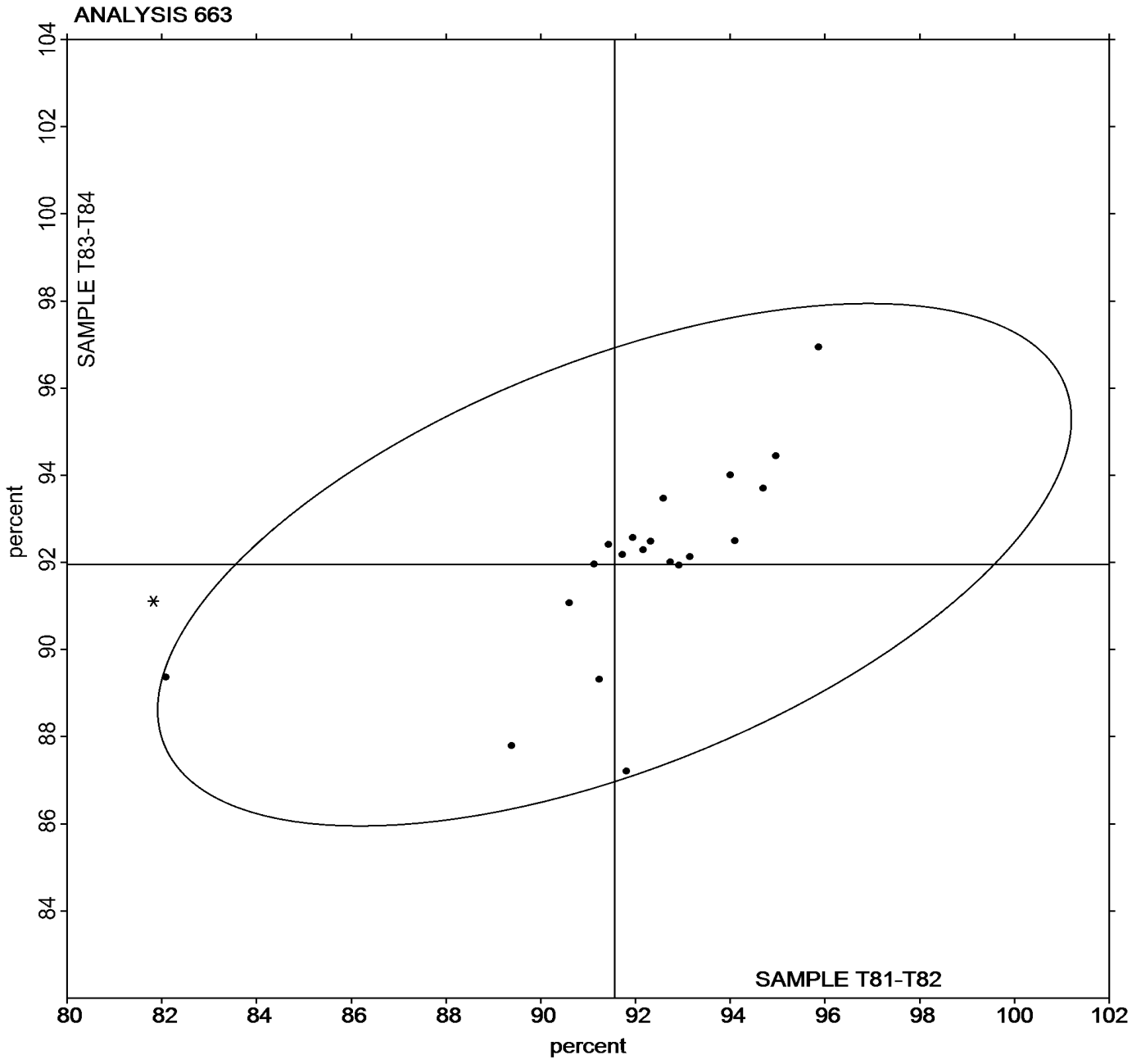
Grand Mean Sample **T81-T82** = 91.556 percent

Grand Mean Sample **T83-T84** = 91.946 percent



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Mooney Stress Relaxation: Area under curve (M-s)

WebCode	Data Flag	Sample T81-T82 Lab Mean	Sample T81-T82 Diff from Grand Mean	Sample T81-T82 CPV	Sample T83-T84 Lab Mean	Sample T83-T84 Diff from Grand Mean	Sample T83-T84 CPV	Instr Code
29YTKR		475.0	80.4	0.82	460.3	37.9	0.40	XX
4JXV9M		253.9	-140.6	-1.43	307.4	-115.0	-1.22	MV
8YTW4H		515.6	121.1	1.23	513.6	91.2	0.97	MR
9ENFHK		271.2	-123.4	-1.25	357.2	-65.2	-0.69	TA
BHMXYH		313.7	-80.9	-0.82	325.0	-97.4	-1.04	MV
CK3FCE		413.0	18.5	0.19	379.2	-43.2	-0.46	MR
DJJYLD		419.7	25.2	0.26	435.9	13.5	0.14	MR
DYX6YX		360.9	-33.7	-0.34	453.2	30.8	0.33	TV
EJZY9L		187.8	-206.8	-2.10	169.6	-252.8	-2.69	MV
F8PQ8E		358.1	-36.5	-0.37	445.8	23.4	0.25	MV
G8JW2D		405.2	10.7	0.11	429.8	7.4	0.08	MV
JNVNXA		441.3	46.8	0.47	417.8	-4.6	-0.05	MR
K8BT3J		446.7	52.1	0.53	446.8	24.4	0.26	MR
NP263F		465.4	70.8	0.72	425.9	3.5	0.04	MR
PBEFJ4		457.7	63.1	0.64	467.5	45.1	0.48	MR
QPPFQE		260.2	-134.3	-1.36	369.8	-52.6	-0.56	TA
QXLDF3	X	410.8	16.2	0.16	780.2	357.8	3.81	MV
RNEX89		554.0	159.4	1.62	609.0	186.6	1.99	MR
Z3HVGE		484.4	89.8	0.91	516.9	94.5	1.01	MR
Z7LTGT		412.8	18.2	0.18	494.9	72.5	0.77	MR

Summary Statistics

	Sample T81-T82	Sample T83-T84
Grand Means	394.55 M-s	422.40 M-s
Stnd Dev Btwn Labs	98.53 M-s	93.89 M-s

Statistics based on 19 of 20 reporting participants

Samples T81-T82: SBR & T83-T84: Butyl

Comments on Assigned Data Flags for Test #664

QXLDF3 (X) - Data for sample group T83-T84 are high. Inconsistent within the determinations of sample group T83-T84.

Key to Instrument Codes Reported by Participants

MR	Alpha Technologies Model MV2000/MV2000E	MV	MonTech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

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Key to Instrument Codes Reported by Participants

MR	Alpha Technologies Model MV2000/MV2000E	MV	MonTech
TA	TA Instruments (any model)	TV	Tech Pro Visc Tech (any model)
XX	Instrument make/model not specified by lab		

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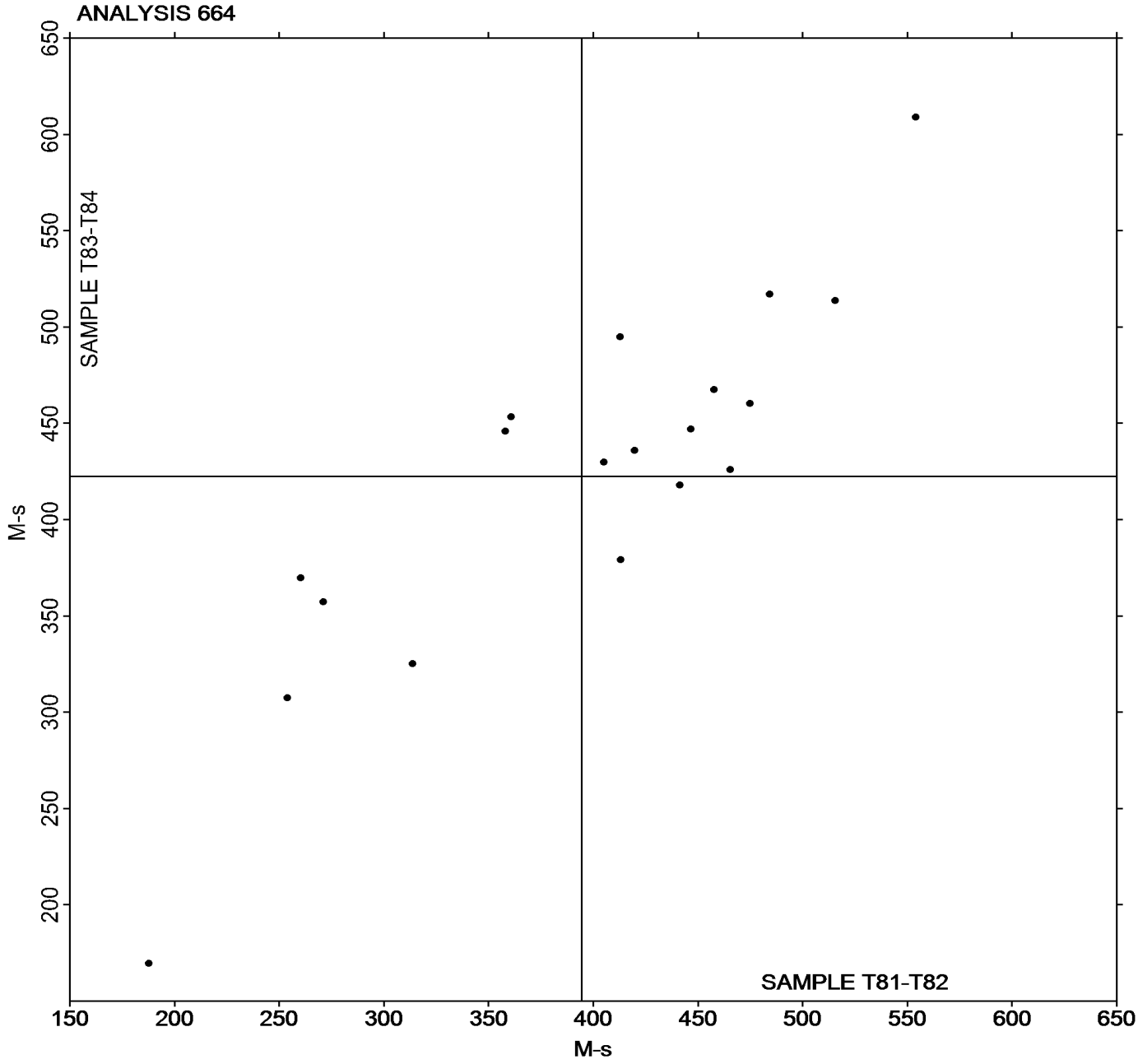
Grand Mean Sample **T81-T82** = 394.55 M-s

Grand Mean Sample **T83-T84** = 422.40 M-s



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		1.502	-0.088	-0.77	2.938	-0.135	-0.55
BBW9WE		1.580	-0.009	-0.08	3.017	-0.057	-0.23
CK3FCE		1.503	-0.086	-0.75	2.855	-0.219	-0.89
DYX6YX		1.502	-0.088	-0.77	2.827	-0.247	-1.00
EJZY9L		1.768	0.179	1.56	3.520	0.446	1.81
HAJWB6		1.490	-0.099	-0.87	3.008	-0.065	-0.26
TYMN6W		1.527	-0.063	-0.55	2.875	-0.199	-0.80
UMALJY		1.760	0.171	1.49	3.290	0.216	0.88
WVVQ4V		1.673	0.084	0.73	3.332	0.258	1.05

Summary Statistics

	Sample X81-X82	Sample X83-X84
Grand Means	1.5894 minutes	3.0735 minutes
Stnd Dev Btwn Labs	0.1145 minutes	0.2467 minutes

Statistics based on 9 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

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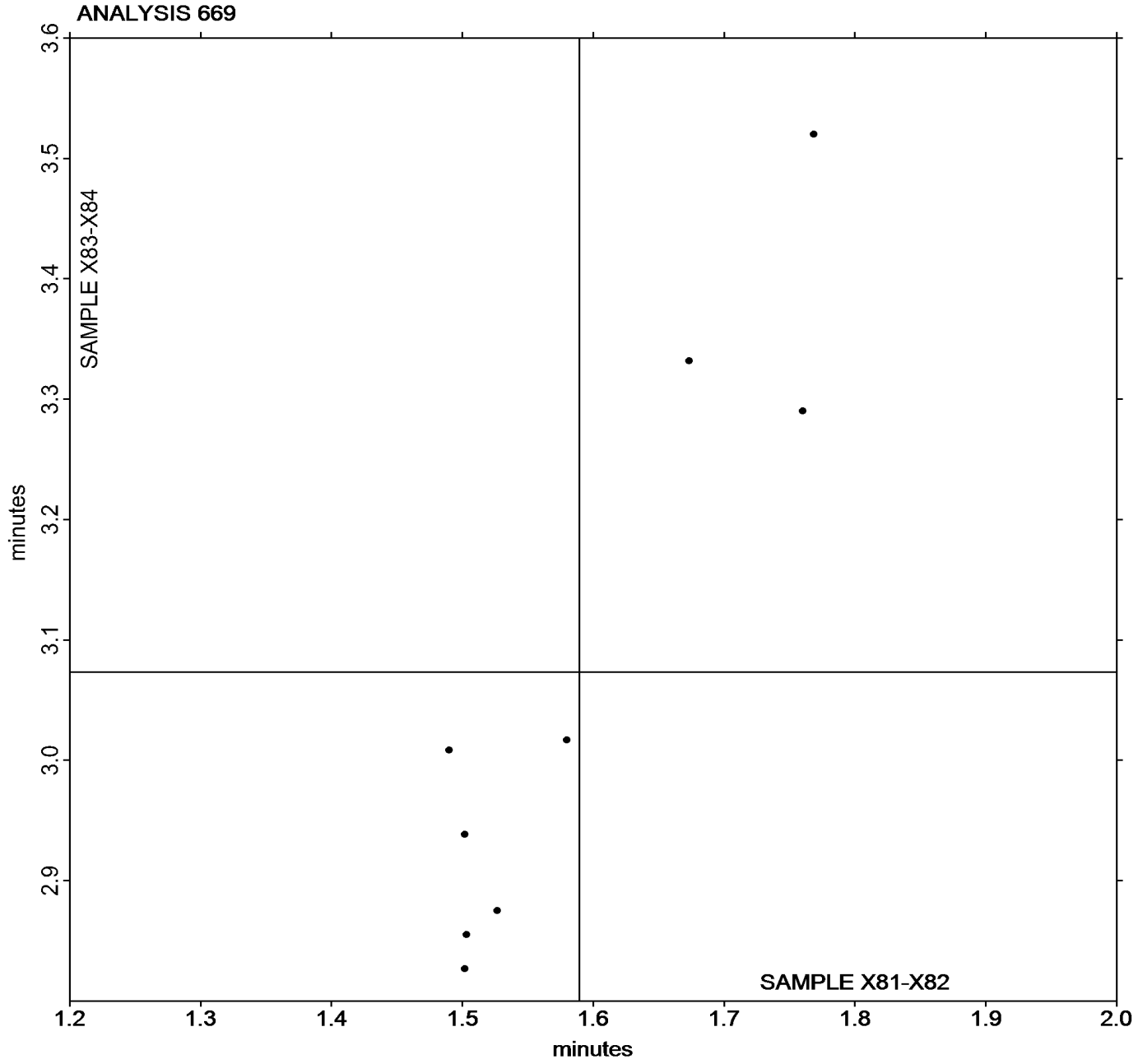
Grand Mean Sample **X81-X82** = 1.5894 minutes

Grand Mean Sample **X83-X84** = 3.0735 minutes



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		1.068	-0.060	-0.69	2.083	-0.182	-0.91
BBW9WE		1.095	-0.034	-0.38	2.207	-0.059	-0.29
CK3FCE		1.080	-0.049	-0.55	2.120	-0.145	-0.72
DYX6YX		1.097	-0.032	-0.36	2.338	0.073	0.37
EJZY9L		1.062	-0.067	-0.76	2.182	-0.084	-0.42
HAJWB6		1.080	-0.049	-0.55	2.163	-0.102	-0.51
TYMN6W		1.115	-0.014	-0.15	2.107	-0.159	-0.79
UMALJY		1.297	0.168	1.92	2.578	0.313	1.56
WVVQ4V		1.263	0.135	1.54	2.608	0.343	1.71

Summary Statistics

	Sample X81-X82	Sample X83-X84
Grand Means	1.1285 minutes	2.2652 minutes
Stnd Dev Btwn Labs	0.0877 minutes	0.2004 minutes

Statistics based on 9 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

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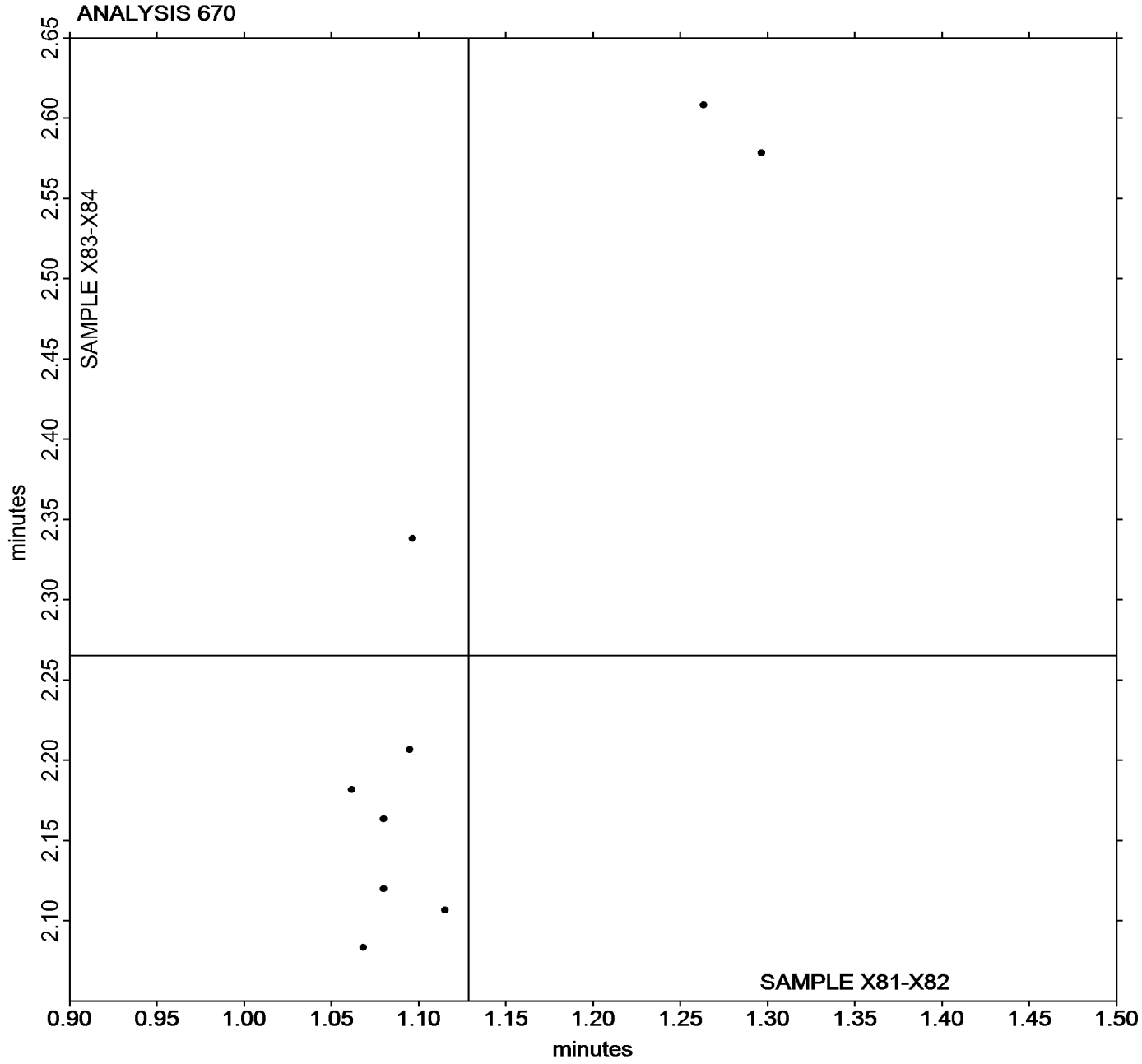
Grand Mean Sample **X81-X82** = 1.1285 minutes

Grand Mean Sample **X83-X84** = 2.2652 minutes



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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		2.940	-0.244	-0.66	4.993	-0.137	-0.39
BBW9WE		3.205	0.021	0.06	5.093	-0.037	-0.10
CK3FCE		2.873	-0.310	-0.84	4.819	-0.312	-0.89
DYX6YX		3.007	-0.177	-0.48	4.558	-0.572	-1.63
EJZY9L		4.060	0.876	2.38	5.627	0.497	1.42
HAJWB6		3.083	-0.100	-0.27	5.157	0.027	0.08
TYMN6W		2.883	-0.300	-0.81	5.032	-0.098	-0.28
UMALJY		3.353	0.170	0.46	5.248	0.118	0.34
WVVQ4V		3.247	0.063	0.17	5.643	0.513	1.47

Summary Statistics

	Sample X81-X82	Sample X83-X84
Grand Means	3.1835 minutes	5.1300 minutes
Stnd Dev Btwn Labs	0.3689 minutes	0.3497 minutes

Statistics based on 9 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

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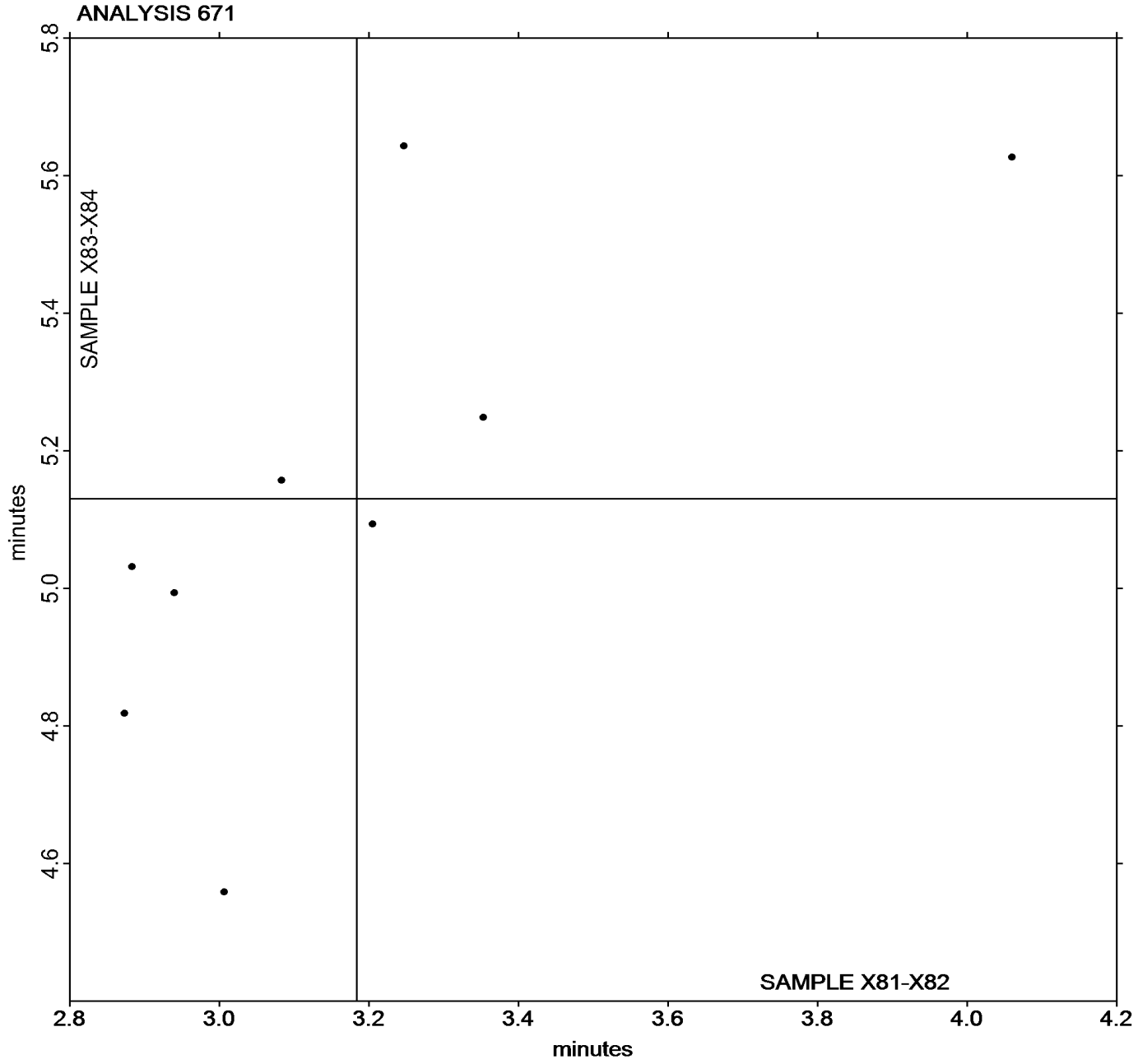
Grand Mean Sample **X81-X82** = 3.1835 minutes

Grand Mean Sample **X83-X84** = 5.1300 minutes



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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		13.21	-1.00	-0.51	11.61	0.98	0.54
BBW9WE		15.71	1.49	0.76	10.09	-0.55	-0.30
CK3FCE		13.38	-0.83	-0.42	8.68	-1.95	-1.08
DYX6YX		14.04	-0.17	-0.09	9.61	-1.02	-0.56
EJZY9L		18.36	4.15	2.11	11.01	0.37	0.21
HAJWB6		15.12	0.90	0.46	14.81	4.18	2.31
TYMN6W		11.65	-2.56	-1.30	9.11	-1.53	-0.84
UMALJY		13.70	-0.51	-0.26	10.19	-0.45	-0.25
WVVQ4V		12.72	-1.49	-0.76	10.61	-0.03	-0.02

Summary Statistics

	Sample X81-X82	Sample X83-X84
Grand Means	14.210 minutes	10.635 minutes
Stnd Dev Btwn Labs	1.969 minutes	1.811 minutes

Statistics based on 9 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

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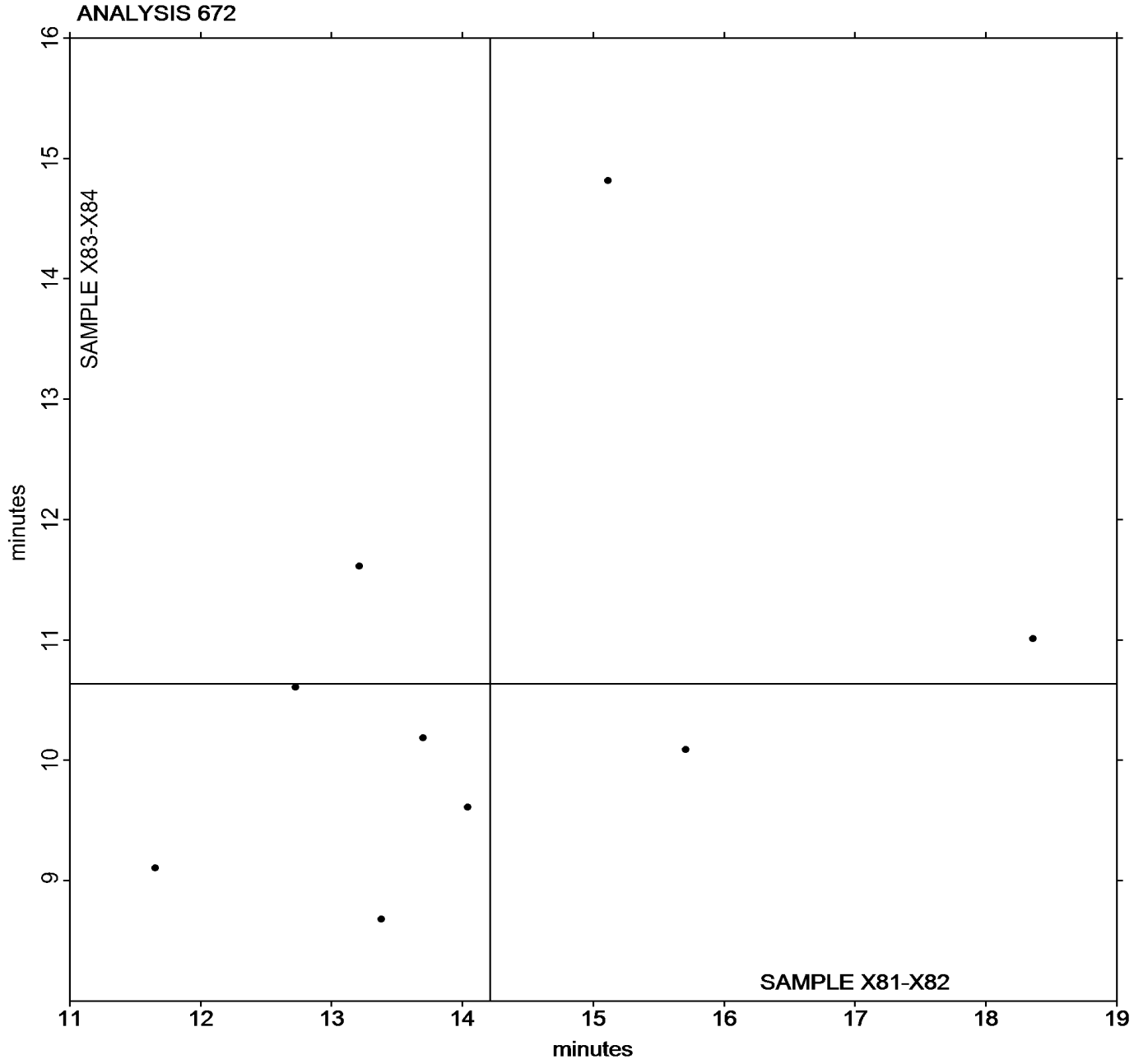
Grand Mean Sample **X81-X82** = 14.210 minutes

Grand Mean Sample **X83-X84** = 10.635 minutes



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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		7.938	-1.319	-0.53	6.333	-1.598	-0.67
BBW9WE		7.425	-1.833	-0.73	6.150	-1.781	-0.74
CK3FCE		8.292	-0.966	-0.39	6.343	-1.588	-0.66
DYX6YX		9.028	-0.229	-0.09	11.617	3.686	1.54
EJZY9L		15.628	6.371	2.54	12.425	4.494	1.88
HAJWB6		7.793	-1.464	-0.58	6.488	-1.443	-0.60
TYMN6W		8.210	-1.048	-0.42	6.703	-1.228	-0.51
UMALJY		9.842	0.584	0.23	7.658	-0.273	-0.11
WVVQ4V		9.163	-0.094	-0.04	7.660	-0.271	-0.11

Summary Statistics

Grand Means	9.2578 lbf.in	7.9309 lbf.in
Stnd Dev Btwn Labs	2.5065 lbf.in	2.3917 lbf.in

Statistics based on 9 of 9 reporting participants

Summary Statistics in SI Units

Grand Means	10.460 dN.m	8.9607 dN.m
Stnd Dev Btwn Labs	2.832 dN.m	2.7023 dN.m

Statistics based on 9 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

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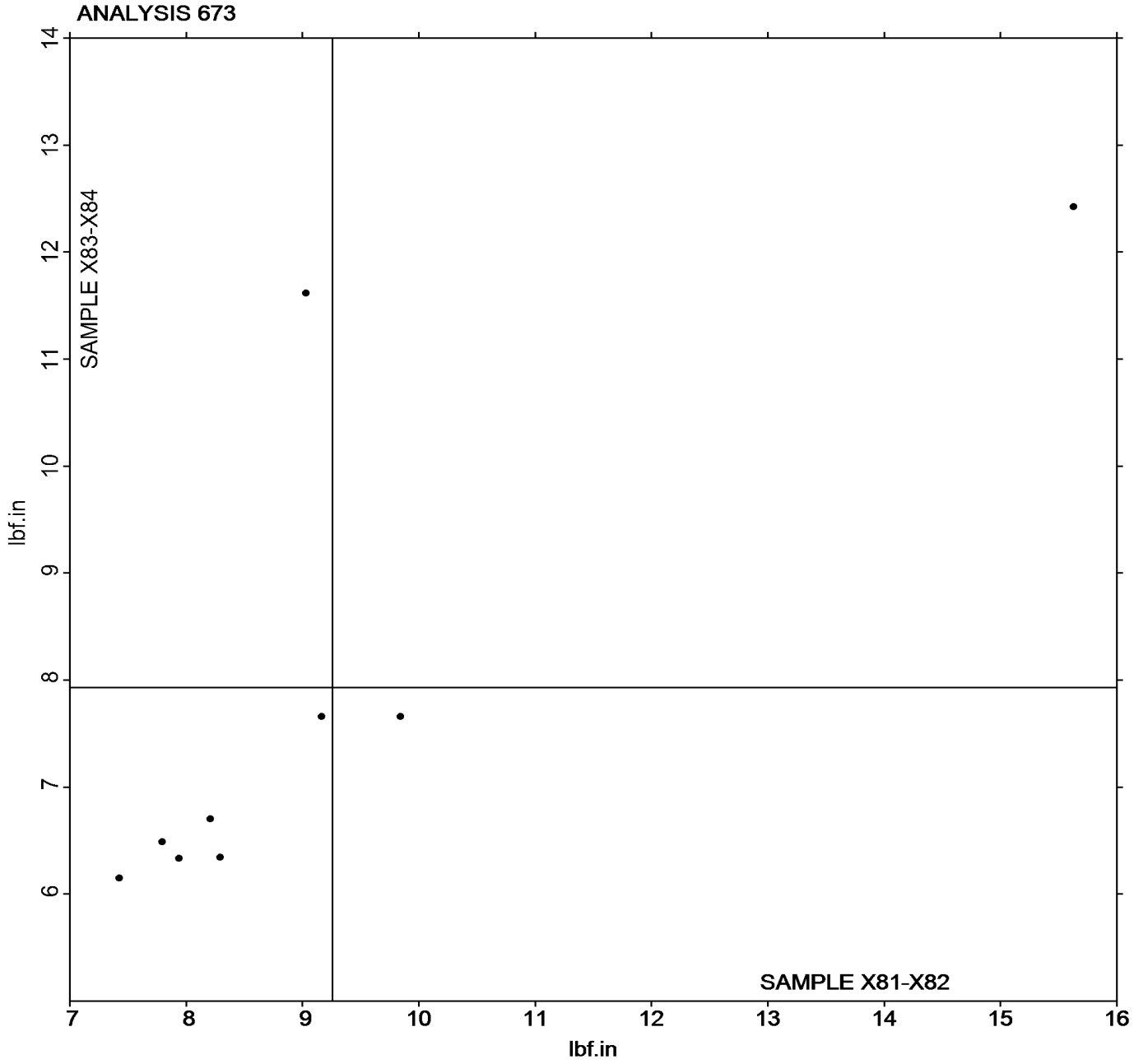
Grand Mean Sample **X81-X82** = 9.2578 lbf.in

Grand Mean Sample **X83-X84** = 7.9309 lbf.in



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample X81-X82 Lab Mean	Diff from Grand Mean	CPV	Sample X83-X84 Lab Mean	Diff from Grand Mean	CPV
7KDEVN		48.50	3.95	1.58	37.89	2.59	1.32
BBW9WE		44.74	0.19	0.08	33.28	-2.02	-1.03
CK3FCE		45.21	0.67	0.27	34.81	-0.49	-0.25
DYX6YX		44.01	-0.53	-0.21	37.24	1.94	0.99
EJZY9L	X	100.24	55.69	22.24	76.88	41.58	21.23
HAJWB6		46.09	1.54	0.62	37.45	2.15	1.10
TYMN6W		42.20	-2.35	-0.94	34.53	-0.76	-0.39
UMALJY		45.41	0.86	0.34	34.29	-1.01	-0.52
WVVQ4V		40.20	-4.35	-1.73	32.89	-2.41	-1.23

Summary Statistics

	Sample X81-X82	Sample X83-X84
Grand Means	44.544 lbf.in	35.298 lbf.in
Stnd Dev Btwn Labs	2.505 lbf.in	1.959 lbf.in

Statistics based on 8 of 9 reporting participants

Summary Statistics in SI Units

	Sample X81-X82	Sample X83-X84
Grand Means	50.328 dN.m	39.881 dN.m
Stnd Dev Btwn Labs	2.830 dN.m	2.213 dN.m

Statistics based on 8 of 9 reporting participants

Samples X81-X82: EPDM compound #1 & X83-X84: EPDM compound #2

Comments on Assigned Data Flags for Test #674

EJZY9L (X) - Extreme Data.

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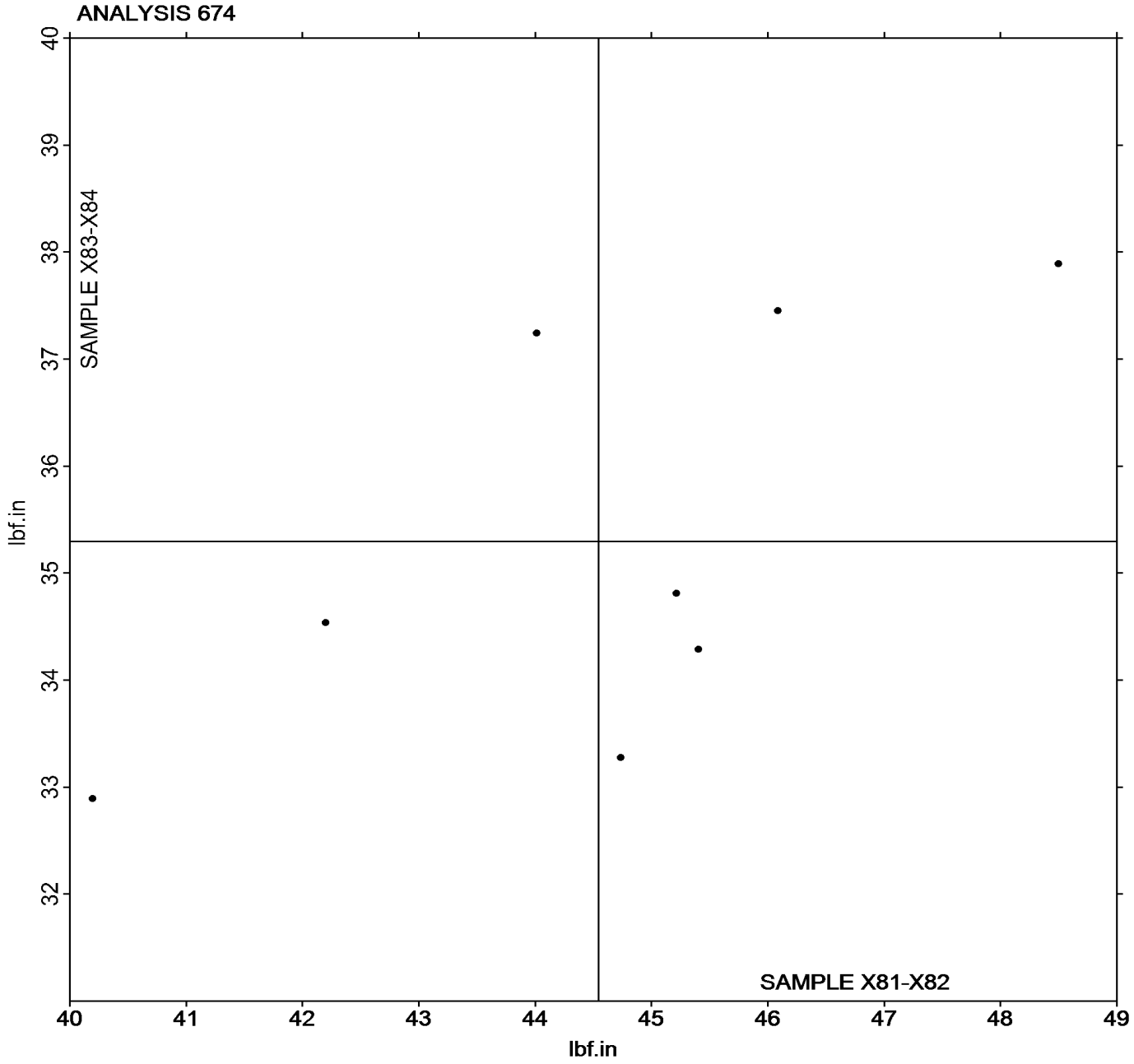
Grand Mean Sample **X81-X82** = 44.544 lbf.in

Grand Mean Sample **X83-X84** = 35.298 lbf.in



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3ND7LQ		2.387	0.165	1.18	2.430	0.222	1.03	MC
4JXV9M	*	1.985	-0.237	-1.68	1.643	-0.564	-2.61	MR
772QTL		2.243	0.022	0.16	2.145	-0.063	-0.29	MC
7KDEVN		2.358	0.137	0.97	2.435	0.227	1.05	MC
8YTW4H		2.393	0.172	1.22	2.422	0.214	0.99	MC
AFXCQ2		2.202	-0.020	-0.14	2.275	0.067	0.31	XX
B3MRG2		2.300	0.078	0.56	2.280	0.072	0.33	MC
BA8JUR		2.120	-0.102	-0.72	2.123	-0.084	-0.39	MC
BHMXYH		2.273	0.052	0.37	2.337	0.129	0.60	MC
C98AA4		2.208	-0.013	-0.09	2.264	0.056	0.26	MC
CK3FCE		2.398	0.177	1.26	2.497	0.289	1.34	MM
DJJYLD		2.228	0.007	0.05	2.215	0.007	0.03	MD
E9DBA8	X	2.065	-0.157	-1.11	1.393	-0.814	-3.77	MC
EJZY9L		2.277	0.055	0.39	2.418	0.211	0.97	XX
ETMLXB		2.227	0.005	0.04	1.997	-0.211	-0.98	MC
FVNNMC		2.117	-0.105	-0.75	2.073	-0.134	-0.62	MC
G8JW2D		2.310	0.088	0.63	2.333	0.126	0.58	MM
GV4E3A		2.095	-0.127	-0.90	2.200	-0.008	-0.04	MC
HX6XP9		2.180	-0.042	-0.30	2.373	0.166	0.77	ME
K8BT3J		2.153	-0.068	-0.49	1.897	-0.311	-1.44	MC
K9W94U		2.475	0.253	1.81	2.310	0.102	0.47	TP
KL72F7		2.078	-0.143	-1.02	2.203	-0.004	-0.02	MC
MEMQMS		1.965	-0.257	-1.83	1.747	-0.461	-2.13	MC
NP263F		2.187	-0.035	-0.25	2.215	0.007	0.03	MC
PBEFJ4	*	1.828	-0.393	-2.80	1.780	-0.428	-1.98	MC
PW8Y73		2.288	0.067	0.48	2.212	0.004	0.02	MC
Q7AUNX		2.417	0.195	1.39	2.393	0.186	0.86	ME
QPPFQE		2.223	0.002	0.01	2.223	0.016	0.07	MD
QXLDF3		2.047	-0.175	-1.25	1.803	-0.404	-1.87	MC
UMALJY		2.217	-0.005	-0.03	2.315	0.107	0.50	MC
UW9Q2Y	X	2.215	-0.007	-0.05	1.543	-0.664	-3.07	MC
XN8DUU		2.150	-0.072	-0.51	2.232	0.024	0.11	ME
Z2497R		2.272	0.050	0.36	2.238	0.031	0.14	MC
Z2UQB8		2.260	0.038	0.27	2.400	0.192	0.89	MC
Z3HVGE		2.148	-0.073	-0.52	2.047	-0.161	-0.75	MM
Z7LTGT		2.327	0.105	0.75	2.398	0.191	0.88	MD
ZYLGHB		2.417	0.195	1.39	2.397	0.189	0.87	MC

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Summary Statistics		
Grand Means	2.2215 minutes	2.2077 minutes
Stnd Dev Btwn Labs	0.1404 minutes	0.2162 minutes

Statistics based on 35 of 37 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #684

E9DBA8 (X) - Data for sample group X87-X88 are low.

UW9Q2Y (X) - Data for sample group X87-X88 are low.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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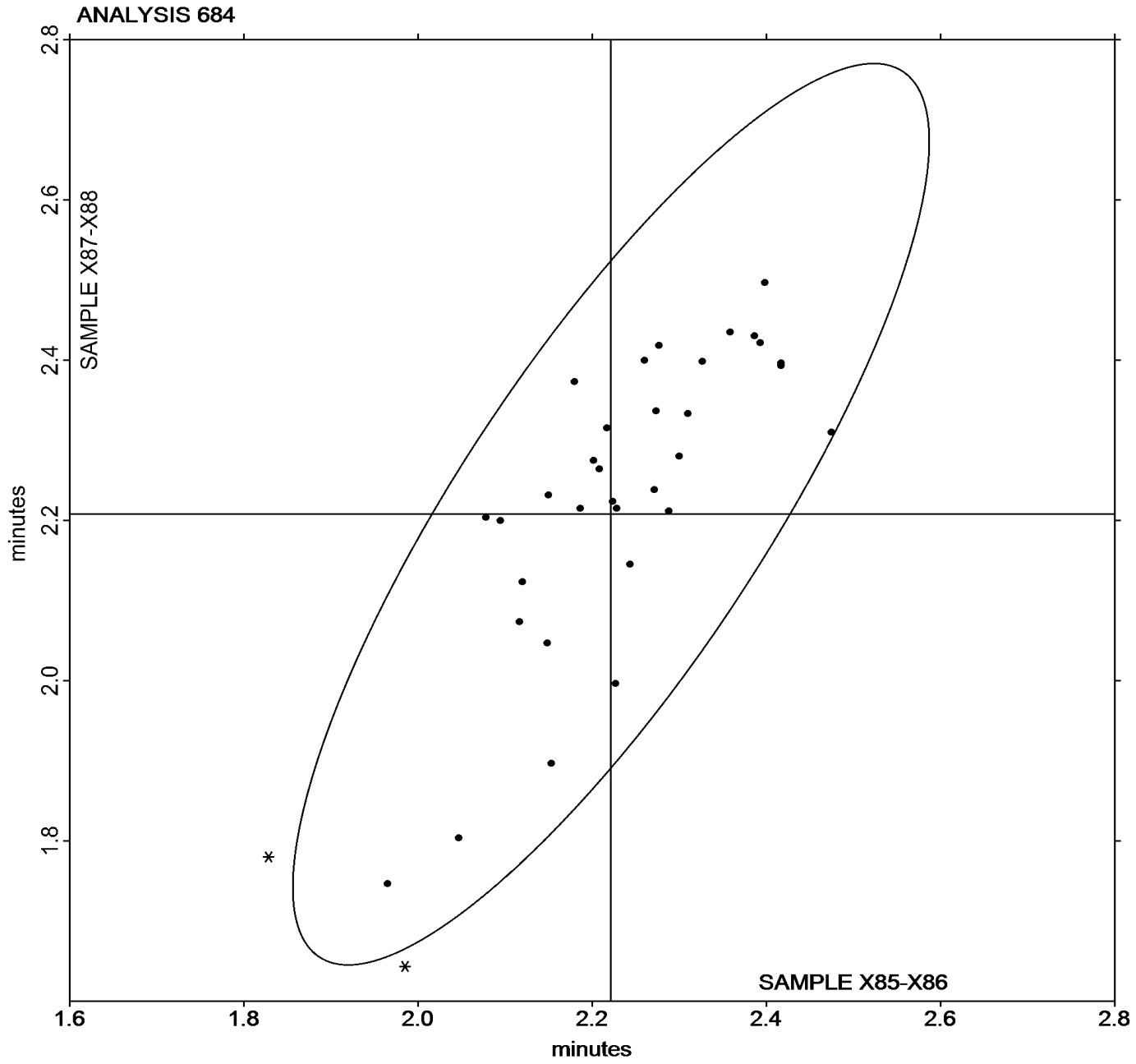
Grand Mean Sample **X85-X86** = 2.2215 minutes

Grand Mean Sample **X87-X88** = 2.2077 minutes



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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		1.935	-0.128	-0.90	1.971	-0.113	-0.59	MC
3ND7LQ		2.213	0.151	1.06	2.278	0.194	1.01	MC
4JXV9M	*	1.743	-0.319	-2.25	1.505	-0.579	-3.02	MR
772QTL		2.067	0.004	0.03	2.022	-0.063	-0.33	MC
7KDEVN		2.200	0.137	0.97	2.288	0.204	1.07	MC
8XY7X4		2.103	0.041	0.29	2.063	-0.021	-0.11	MC
8YTW4H		2.087	0.024	0.17	2.163	0.079	0.41	MC
AFXCQ2		2.108	0.046	0.32	2.202	0.117	0.61	XX
B3MRG2		2.105	0.042	0.30	2.110	0.026	0.13	MC
BA8JUR		1.805	-0.258	-1.82	1.853	-0.231	-1.21	MC
BHMXYH		2.122	0.059	0.41	2.268	0.184	0.96	MC
C98AA4		2.000	-0.063	-0.44	2.108	0.024	0.13	MC
CK3FCE		2.360	0.297	2.09	2.522	0.437	2.28	MM
DJJYLD		2.138	0.076	0.53	2.153	0.069	0.36	MD
E9DBA8	X	2.018	-0.044	-0.31	1.418	-0.666	-3.48	MC
EJZY9L		2.075	0.012	0.09	2.232	0.147	0.77	XX
ETMLXB		2.017	-0.046	-0.32	1.853	-0.231	-1.21	MC
FVNNMC		2.028	-0.034	-0.24	1.995	-0.089	-0.47	MC
G8JW2D		2.067	0.004	0.03	2.118	0.034	0.18	MM
GV4E3A		1.822	-0.241	-1.70	1.933	-0.151	-0.79	MC
HX6XP9		1.993	-0.069	-0.49	2.178	0.094	0.49	ME
K8BT3J		2.092	0.029	0.20	1.880	-0.204	-1.07	MC
K9W94U	*	2.390	0.327	2.30	2.242	0.157	0.82	TP
KL72F7		1.962	-0.101	-0.71	2.085	0.001	0.00	MC
MEMQMS		1.880	-0.183	-1.29	1.680	-0.404	-2.11	MC
NP263F		2.113	0.051	0.36	2.150	0.066	0.34	MC
NY4NF4		1.982	-0.081	-0.57	2.052	-0.033	-0.17	MC
PBEFJ4		1.793	-0.269	-1.90	1.750	-0.334	-1.74	MC
PW8Y73		2.057	-0.006	-0.04	2.007	-0.078	-0.40	MC
Q7AUNX		2.322	0.259	1.82	2.307	0.222	1.16	ME
QPPFQE		2.037	-0.026	-0.18	2.053	-0.031	-0.16	MD
QXLDF3	X	1.292	-0.771	-5.43	1.182	-0.903	-4.71	MC
UMALJY		2.087	0.024	0.17	2.198	0.114	0.60	MC
UW9Q2Y	X	2.072	0.009	0.06	1.483	-0.601	-3.14	MC
WVNNAC		2.045	-0.018	-0.12	2.063	-0.021	-0.11	MC
XN8DUU		2.032	-0.031	-0.22	2.132	0.047	0.25	ME
Z2497R		2.152	0.089	0.63	2.142	0.057	0.30	MC
Z2UQB8		2.060	-0.003	-0.02	2.215	0.131	0.68	MC

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MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample X85-X86 Lab Mean	Sample X85-X86 Diff from Grand Mean	Sample X85-X86 CPV	Sample X87-X88 Lab Mean	Sample X87-X88 Diff from Grand Mean	Sample X87-X88 CPV	Instr Code
Z3HVGE		2.020	-0.043	-0.30	1.950	-0.134	-0.70	MM
Z7LTGT		2.150	0.087	0.61	2.240	0.156	0.81	MD
ZYLGHB		2.225	0.162	1.14	2.237	0.152	0.80	MC

Summary Statistics

	Sample X85-X86	Sample X87-X88
Grand Means	2.0628 minutes	2.0842 minutes
Stnd Dev Btwn Labs	0.1421 minutes	0.1915 minutes

Statistics based on 38 of 41 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #685

E9DBA8 (X) - Data for sample group X87-X88 are low.

QXLDF3 (X) - Data for all samples are low. Inconsistent within the determinations of sample group X87-X88.

UW9Q2Y (X) - Data for sample group X87-X88 are low.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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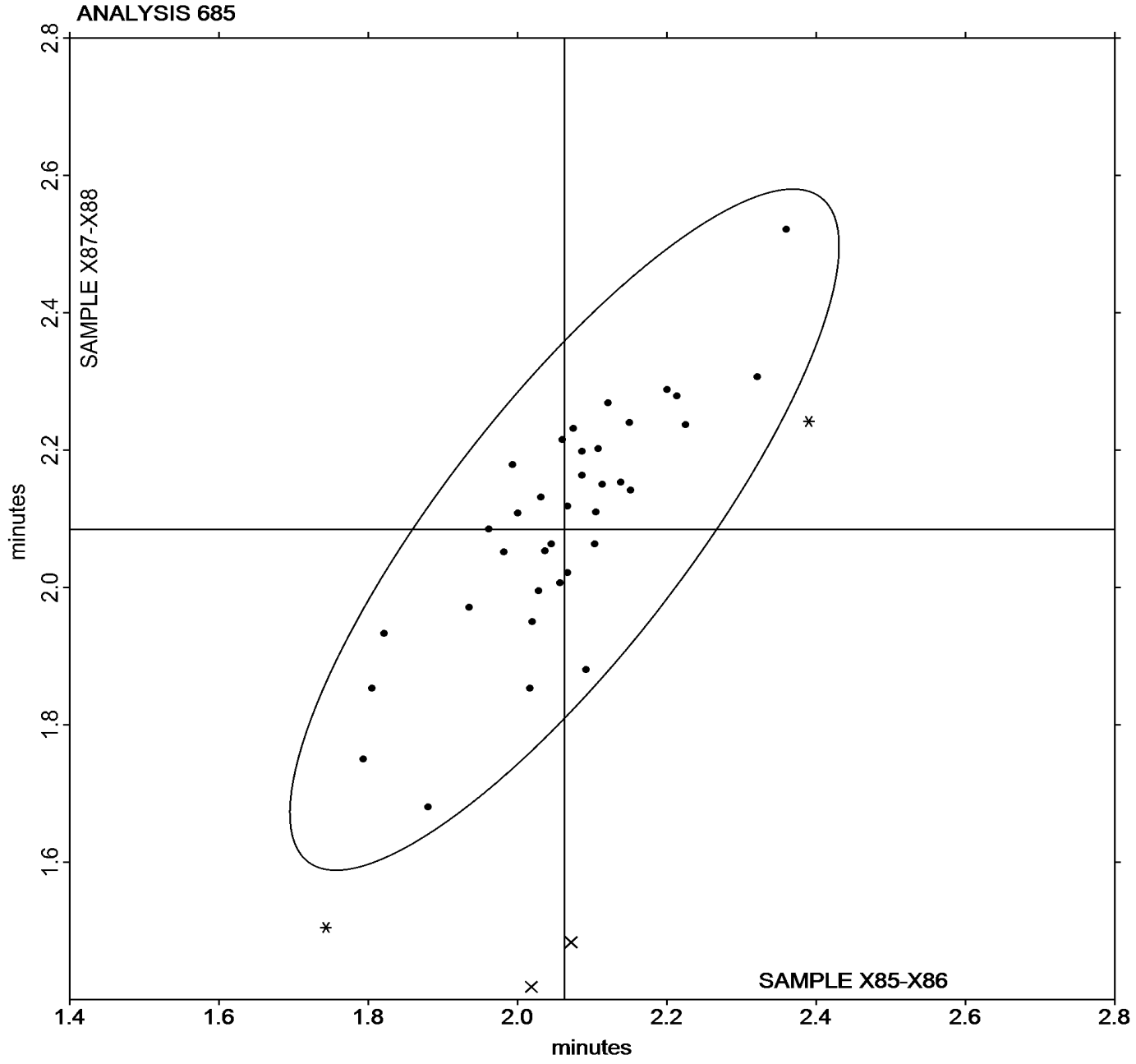
Grand Mean Sample **X85-X86** = 2.0628 minutes

Grand Mean Sample **X87-X88** = 2.0842 minutes



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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		4.518	0.086	0.35	4.595	0.166	0.49	MC
3ND7LQ		4.703	0.272	1.10	4.788	0.359	1.06	MC
4JXV9M		4.240	-0.191	-0.77	3.828	-0.601	-1.77	MR
772QTL		4.467	0.036	0.14	4.358	-0.071	-0.21	MC
7KDEVN		4.680	0.249	1.00	4.818	0.389	1.15	MC
8XY7X4		4.227	-0.204	-0.83	4.118	-0.311	-0.92	MC
8YTW4H		4.888	0.457	1.85	5.003	0.574	1.69	MC
AFXCQ2		4.275	-0.156	-0.63	4.403	-0.026	-0.08	XX
B3MRG2		4.555	0.124	0.50	4.620	0.191	0.56	MC
BA8JUR		4.440	0.009	0.04	4.457	0.028	0.08	MC
BHMXYH		4.543	0.112	0.45	4.672	0.243	0.72	MC
C98AA4		4.497	0.066	0.27	4.625	0.196	0.58	MC
CK3FCE		4.677	0.246	0.99	4.862	0.433	1.28	MM
DJJYLD		4.265	-0.166	-0.67	4.295	-0.134	-0.39	MD
E9DBA8	X	3.935	-0.496	-2.00	3.203	-1.226	-3.61	MC
EJZY9L		4.570	0.139	0.56	4.815	0.386	1.14	XX
ETMLXB		4.553	0.122	0.49	4.263	-0.166	-0.49	MC
FVNNMC		4.002	-0.429	-1.73	3.903	-0.526	-1.55	MC
G8JW2D		4.717	0.286	1.15	4.750	0.321	0.95	MM
GV4E3A		4.468	0.037	0.15	4.578	0.149	0.44	MC
HX6XP9		4.482	0.051	0.20	4.657	0.228	0.67	ME
K8BT3J		4.252	-0.179	-0.72	3.995	-0.434	-1.28	MC
K9W94U	*	4.768	0.337	1.36	4.480	0.051	0.15	TP
KL72F7		4.223	-0.208	-0.84	4.340	-0.089	-0.26	MC
MEMQMS	*	3.718	-0.713	-2.88	3.515	-0.914	-2.69	MC
NP263F		4.313	-0.118	-0.48	4.317	-0.112	-0.33	MC
NY4NF4		4.592	0.161	0.65	4.663	0.234	0.69	MC
PBEFJ4	X	3.283	-1.148	-4.63	3.238	-1.191	-3.51	MC
PW8Y73		4.417	-0.014	-0.06	4.268	-0.161	-0.47	MC
Q7AUNX		4.685	0.254	1.02	4.635	0.206	0.61	ME
QPPFQE		4.032	-0.399	-1.61	4.037	-0.392	-1.16	MD
QXLDF3		4.117	-0.314	-1.27	3.753	-0.676	-1.99	MC
UMALJY		4.520	0.089	0.36	4.622	0.193	0.57	MC
UW9Q2Y	X	4.425	-0.006	-0.02	3.540	-0.889	-2.62	MC
WVNNAC		4.197	-0.234	-0.95	4.208	-0.221	-0.65	MC
XN8DUU		4.192	-0.239	-0.97	4.332	-0.097	-0.29	ME
Z2497R		4.370	-0.061	-0.25	4.302	-0.127	-0.38	MC
Z2UQB8		4.478	0.047	0.19	4.685	0.256	0.75	MC

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MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample X85-X86 Lab Mean	Sample X85-X86 Diff from Grand Mean	Sample X85-X86 CPV	Sample X87-X88 Lab Mean	Sample X87-X88 Diff from Grand Mean	Sample X87-X88 CPV	Instr Code
Z3HVGE		4.343	-0.088	-0.35	4.268	-0.161	-0.47	MM
Z7LTGT		4.538	0.107	0.43	4.645	0.216	0.64	MD
ZYLGHB		4.862	0.431	1.74	4.828	0.399	1.18	MC

Summary Statistics

	Sample X85-X86	Sample X87-X88
Grand Means	4.4311 minutes	4.4290 minutes
Stnd Dev Btwn Labs	0.2478 minutes	0.3393 minutes

Statistics based on 38 of 41 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #686

E9DBA8 (X) - Data for sample group X87-X88 are low.

PBEFJ4 (X) - Data for all samples are low.

UW9Q2Y (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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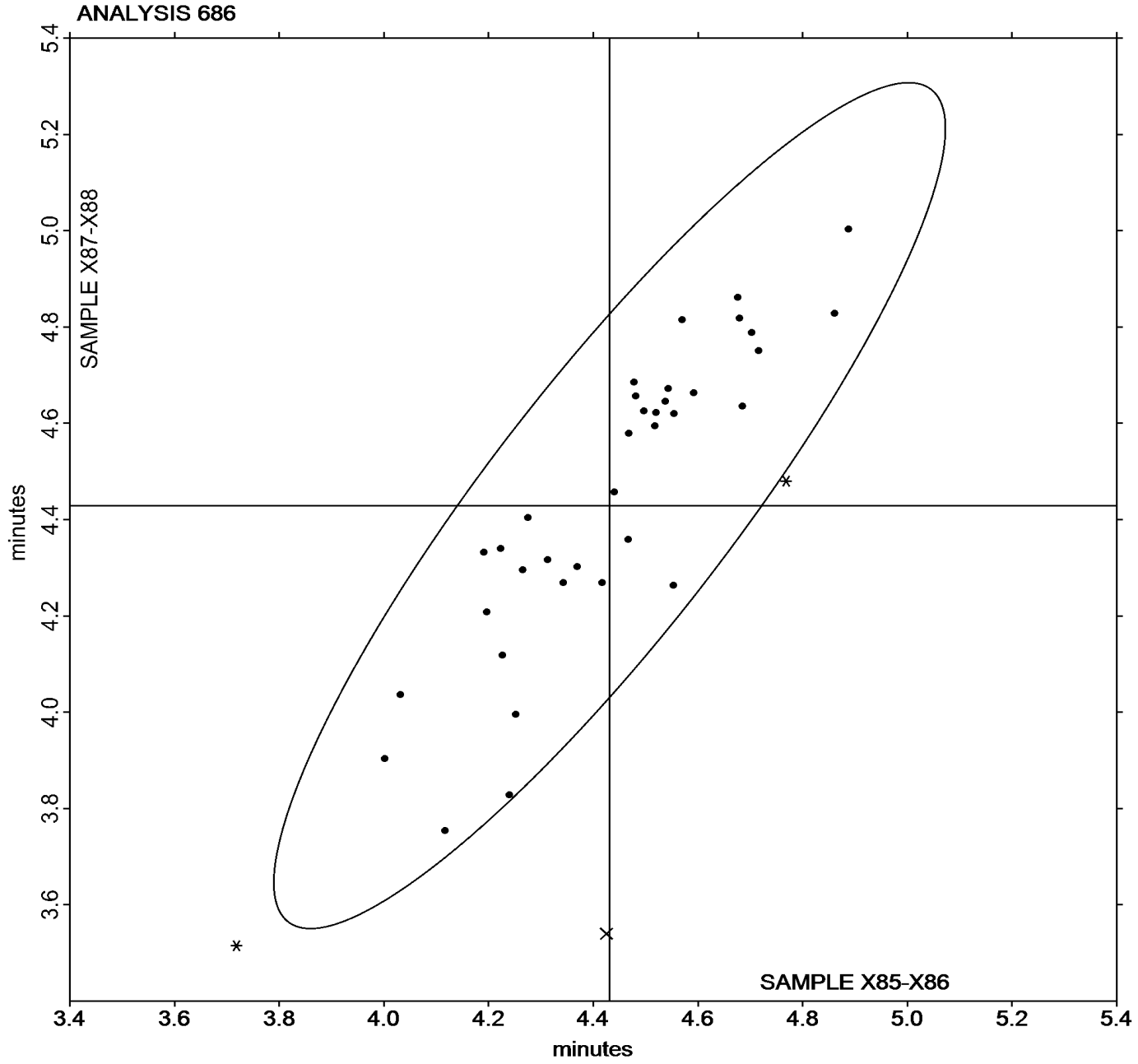
Grand Mean Sample **X85-X86** = 4.4311 minutes

Grand Mean Sample **X87-X88** = 4.4290 minutes



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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		7.898	0.308	0.73	7.985	0.447	0.78	MC
3ND7LQ		7.945	0.354	0.84	7.965	0.427	0.75	MC
4JXV9M		7.185	-0.406	-0.96	6.568	-0.970	-1.70	MR
772QTL		7.362	-0.229	-0.54	7.015	-0.523	-0.92	MC
7KDEVN		8.058	0.468	1.11	8.148	0.610	1.07	MC
8XY7X4		7.225	-0.366	-0.87	6.878	-0.660	-1.16	MC
8YTW4H		8.480	0.889	2.11	8.522	0.983	1.72	MC
AFXCQ2		7.343	-0.247	-0.59	7.420	-0.118	-0.21	XX
B3MRG2		7.770	0.179	0.43	7.705	0.167	0.29	MC
BA8JUR		7.362	-0.228	-0.54	7.255	-0.284	-0.50	MC
BHMXYH		7.990	0.399	0.95	8.090	0.552	0.97	MC
C98AA4		7.514	-0.077	-0.18	7.922	0.384	0.67	MC
CK3FCE		8.282	0.691	1.64	8.463	0.925	1.62	MM
DJJYLD		7.470	-0.121	-0.29	7.377	-0.162	-0.28	MD
E9DBA8		6.760	-0.831	-1.97	6.267	-1.272	-2.23	MC
EJZY9L		7.512	-0.079	-0.19	7.982	0.443	0.78	XX
ETMLXB		7.530	-0.061	-0.14	7.345	-0.193	-0.34	MC
FVNNMC		7.218	-0.372	-0.88	7.135	-0.403	-0.71	MC
G8JW2D		8.378	0.788	1.87	8.368	0.830	1.45	MM
GV4E3A		7.793	0.203	0.48	7.910	0.372	0.65	MC
HX6XP9		7.605	0.014	0.03	8.135	0.597	1.05	ME
K8BT3J		7.450	-0.141	-0.33	7.282	-0.257	-0.45	MC
K9W94U		8.182	0.591	1.40	7.730	0.192	0.34	TP
KL72F7	*	6.763	-0.827	-1.96	7.138	-0.400	-0.70	MC
MEMQMS		7.178	-0.412	-0.98	6.855	-0.683	-1.20	MC
NP263F		7.413	-0.177	-0.42	7.460	-0.078	-0.14	MC
NY4NF4		7.715	0.124	0.30	7.858	0.320	0.56	MC
PBEFJ4	X	5.932	-1.659	-3.94	5.843	-1.695	-2.97	MC
PW8Y73		7.517	-0.074	-0.18	7.302	-0.237	-0.42	MC
Q7AUNX		8.242	0.651	1.55	8.178	0.640	1.12	ME
QPPFQE		7.730	0.139	0.33	7.773	0.235	0.41	MD
QXLDF3		6.767	-0.824	-1.96	6.432	-1.107	-1.94	MC
UMALJY		7.495	-0.096	-0.23	7.638	0.100	0.18	MC
UW9Q2Y	*	7.383	-0.207	-0.49	6.472	-1.067	-1.87	MC
WVNNAC		7.140	-0.451	-1.07	7.022	-0.517	-0.91	MC
XN8DUU		7.393	-0.197	-0.47	7.433	-0.105	-0.18	ME
Z2497R		7.383	-0.207	-0.49	7.207	-0.332	-0.58	MC

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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
Z2UQB8		7.640	0.049	0.12	7.945	0.407	0.71	MC
Z3HVGE		7.703	0.113	0.27	7.428	-0.110	-0.19	MM
Z7LTGT		7.745	0.154	0.37	7.897	0.358	0.63	MD
ZYLGHB		8.103	0.513	1.22	8.033	0.495	0.87	MC

Summary Statistics

	Sample X85-X86	Sample X87-X88
Grand Means	7.5906 minutes	7.5385 minutes
Stnd Dev Btwn Labs	0.4213 minutes	0.5705 minutes

Statistics based on 40 of 41 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #687

PBEFJ4 (X) - Data for all samples are low.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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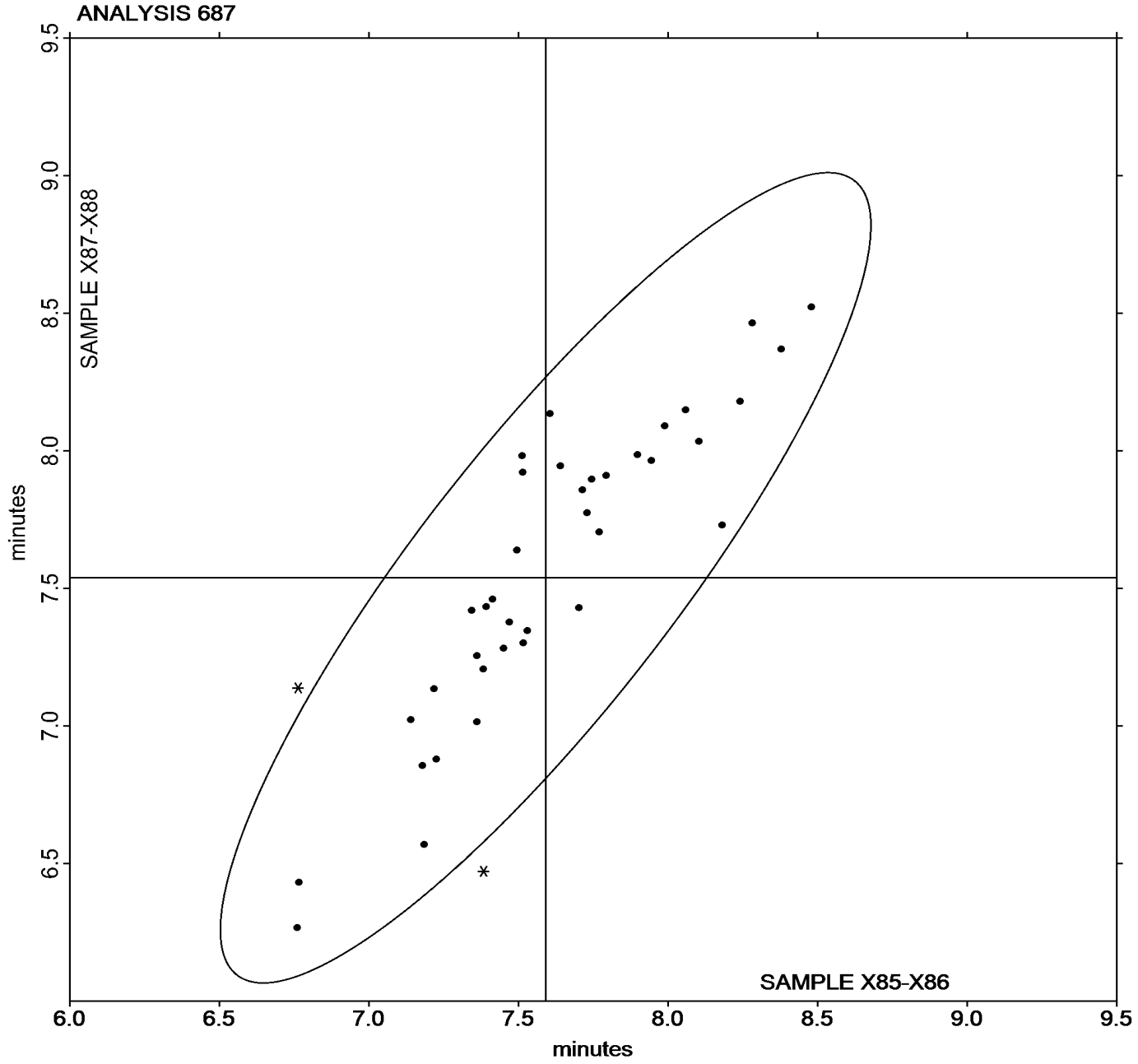
Grand Mean Sample **X85-X86** = 7.5906 minutes

Grand Mean Sample **X87-X88** = 7.5385 minutes



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WebCode	Data Flag	Sample X85-X86 Lab Mean	Sample X85-X86 Diff from Grand Mean	Sample X85-X86 CPV	Sample X87-X88 Lab Mean	Sample X87-X88 Diff from Grand Mean	Sample X87-X88 CPV	Instr Code
29YTKR		2.064	-0.119	-0.25	2.146	-0.134	-0.29	MC
3ND7LQ		1.908	-0.274	-0.57	2.052	-0.228	-0.49	MC
4JXV9M		1.853	-0.329	-0.69	1.812	-0.468	-1.01	MR
772QTL		1.968	-0.214	-0.45	2.070	-0.210	-0.45	MC
7KDEVN		1.772	-0.411	-0.86	1.845	-0.435	-0.94	MC
8XY7X4		2.833	0.651	1.36	2.802	0.522	1.13	MC
8YTW4H		1.701	-0.482	-1.01	1.904	-0.376	-0.81	MC
AFXCQ2		2.598	0.416	0.87	2.730	0.450	0.97	XX
B3MRG2		1.893	-0.290	-0.61	1.991	-0.289	-0.62	MC
BA8JUR		1.598	-0.585	-1.22	1.742	-0.538	-1.16	MC
BHMXYH		2.092	-0.091	-0.19	2.217	-0.063	-0.14	MC
C98AA4		1.830	-0.353	-0.74	1.980	-0.300	-0.65	MC
CK3FCE		1.650	-0.533	-1.11	1.758	-0.522	-1.13	MM
DJJYLD		2.320	0.138	0.29	2.435	0.155	0.33	MD
E9DBA8	X	3.125	0.942	1.97	2.418	0.138	0.30	MC
EJZY9L		1.890	-0.293	-0.61	2.021	-0.259	-0.56	XX
ETMLXB		1.833	-0.349	-0.73	1.873	-0.407	-0.88	MC
FVNNMC		3.257	1.074	2.24	3.347	1.067	2.31	MC
G8JW2D		1.915	-0.268	-0.56	2.053	-0.227	-0.49	MM
GV4E3A		2.110	-0.073	-0.15	2.248	-0.032	-0.07	MC
HX6XP9		1.730	-0.453	-0.94	1.893	-0.387	-0.84	ME
K8BT3J	*	2.780	0.597	1.25	2.628	0.348	0.75	MC
K9W94U		2.102	-0.081	-0.17	2.167	-0.113	-0.24	TP
KL72F7		1.890	-0.293	-0.61	2.068	-0.212	-0.46	MC
MEMQMS	X	3.318	1.136	2.37	3.087	0.807	1.74	MC
NP263F		2.323	0.141	0.29	2.467	0.187	0.40	MC
NY4NF4		1.935	-0.247	-0.52	2.050	-0.230	-0.50	MC
PBEFJ4	*	3.620	1.437	3.00	3.647	1.367	2.95	MC
PW8Y73		2.719	0.536	1.12	2.879	0.599	1.30	MC
Q7AUNX		1.548	-0.634	-1.32	1.645	-0.635	-1.37	ME
QPPFQE		3.110	0.927	1.94	3.249	0.969	2.09	MD
QXLDF3		2.123	-0.059	-0.12	2.153	-0.127	-0.27	MC
UMALJY		1.883	-0.299	-0.62	2.008	-0.272	-0.59	MC
UW9Q2Y	*	2.327	0.144	0.30	2.213	-0.067	-0.14	MC
WVNNAC		2.583	0.401	0.84	2.682	0.402	0.87	MC
XN8DUU		2.558	0.376	0.78	2.685	0.405	0.88	ME
Z2497R		2.415	0.232	0.48	2.549	0.269	0.58	MC

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WebCode	Data Flag	Sample X85-X86 Lab Mean	Sample X85-X86 Diff from Grand Mean	Sample X85-X86 CPV	Sample X87-X88 Lab Mean	Sample X87-X88 Diff from Grand Mean	Sample X87-X88 CPV	Instr Code
Z2UQB8		1.927	-0.256	-0.53	2.100	-0.180	-0.39	MC
Z3HVGE		2.357	0.174	0.36	2.375	0.095	0.21	MM
Z7LTGT		2.397	0.214	0.45	2.593	0.313	0.68	MD
ZYLGHB		1.708	-0.474	-0.99	1.841	-0.439	-0.95	MC

Summary Statistics

	Sample X85-X86	Sample X87-X88
Grand Means	2.1826 lbf.in	2.2800 lbf.in
Stnd Dev Btwn Labs	0.4792 lbf.in	0.4626 lbf.in

Statistics based on 39 of 41 reporting participants

Summary Statistics in SI Units

	Sample X85-X86	Sample X87-X88
Grand Means	2.4660 dN.m	2.5761 dN.m
Stnd Dev Btwn Labs	0.5415 dN.m	0.5227 dN.m

Statistics based on 39 of 41 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #688

E9DBA8 (X) - Inconsistent in testing between samples.

MEMQM9 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group X87-X88.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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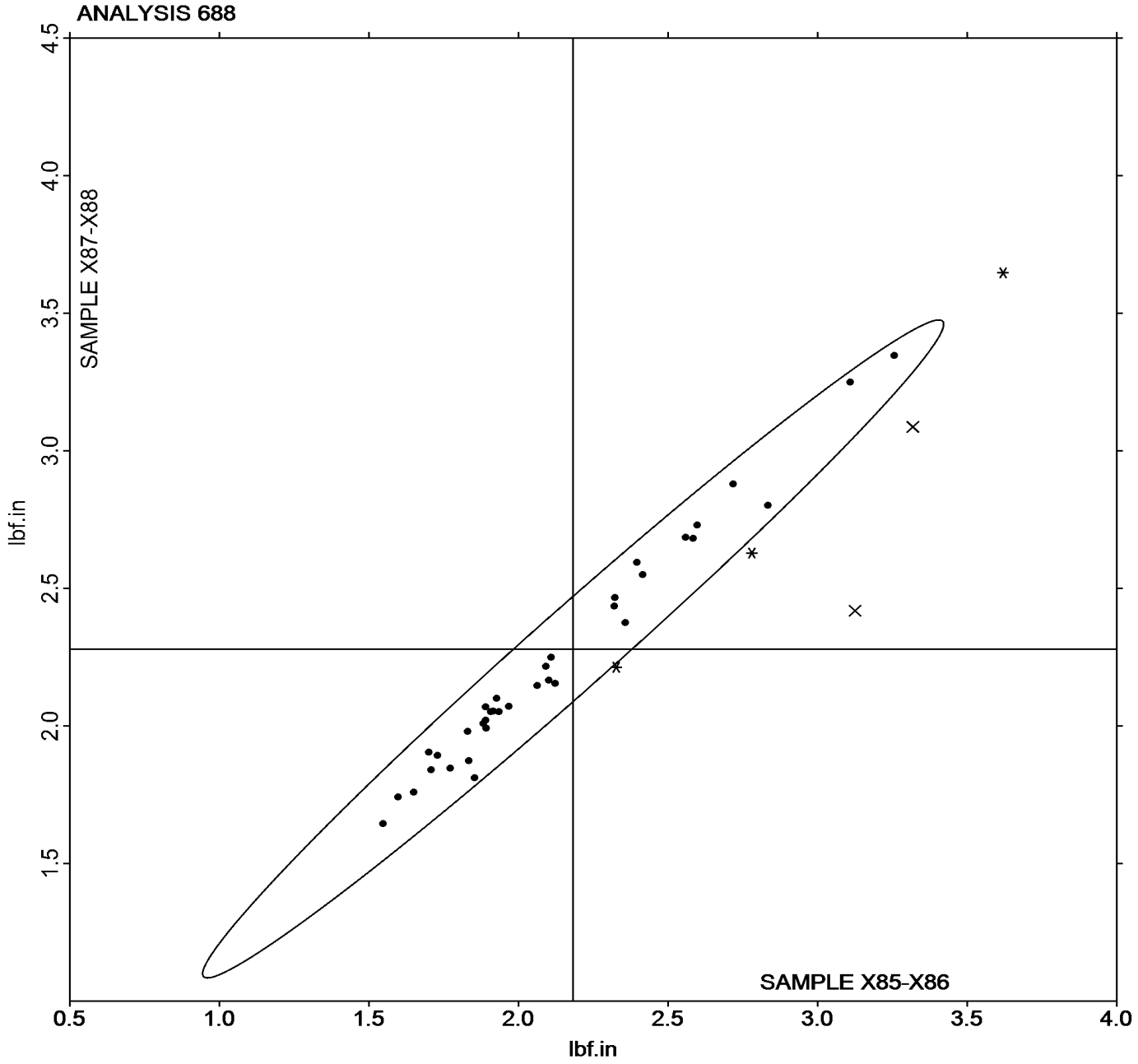
Grand Mean Sample **X85-X86** = 2.1826 lbf.in

Grand Mean Sample **X87-X88** = 2.2800 lbf.in



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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		14.56	0.67	1.04	14.70	1.03	1.60	MC
3ND7LQ		13.79	-0.09	-0.14	13.75	0.07	0.12	MC
4JXV9M	*	14.60	0.72	1.11	13.47	-0.21	-0.32	MR
772QTL		14.12	0.23	0.36	13.66	-0.02	-0.03	MC
7KDEVN		13.61	-0.27	-0.42	13.47	-0.21	-0.33	MC
8XY7X4		13.88	0.00	-0.01	13.56	-0.12	-0.18	MC
8YTW4H		13.71	-0.17	-0.26	13.97	0.29	0.45	MC
AFXCQ2		13.91	0.03	0.05	13.74	0.06	0.09	XX
B3MRG2		13.83	-0.05	-0.08	13.48	-0.20	-0.31	MC
BA8JUR		13.71	-0.17	-0.26	13.47	-0.21	-0.32	MC
BHMXYH		13.84	-0.04	-0.06	13.72	0.04	0.07	MC
C98AA4		13.76	-0.13	-0.20	13.49	-0.19	-0.30	MC
CK3FCE		12.94	-0.94	-1.46	12.86	-0.82	-1.28	MM
DJJYLD		13.58	-0.31	-0.47	13.30	-0.38	-0.59	MD
E9DBA8	X	13.88	0.00	-0.01	12.29	-1.39	-2.16	MC
EJZY9L		12.99	-0.89	-1.38	12.97	-0.71	-1.10	XX
ETMLXB		14.20	0.31	0.49	13.44	-0.24	-0.37	MC
FVNNMC		14.56	0.67	1.04	14.60	0.92	1.43	MC
G8JW2D		14.78	0.90	1.38	14.65	0.97	1.51	MM
GV4E3A		15.22	1.34	2.07	15.29	1.61	2.51	MC
HX6XP9		13.88	-0.01	-0.01	14.14	0.46	0.72	ME
K8BT3J		13.92	0.04	0.06	13.32	-0.36	-0.56	MC
K9W94U		13.06	-0.82	-1.27	13.02	-0.66	-1.02	TP
KL72F7		13.32	-0.57	-0.88	13.54	-0.14	-0.22	MC
MEMQMS		14.65	0.76	1.18	14.21	0.53	0.83	MC
NP263F		13.23	-0.66	-1.02	13.29	-0.39	-0.61	MC
NY4NF4		13.82	-0.07	-0.10	13.85	0.17	0.27	MC
PBEFJ4		14.32	0.43	0.67	14.23	0.55	0.85	MC
PW8Y73		14.50	0.61	0.95	14.55	0.87	1.36	MC
Q7AUNX		12.55	-1.33	-2.05	12.52	-1.16	-1.80	ME
QPPFQE		14.81	0.93	1.43	14.76	1.08	1.68	MD
QXLDF3		14.77	0.88	1.36	13.96	0.28	0.43	MC
UMALJY		13.32	-0.56	-0.86	13.29	-0.39	-0.61	MC
UW9Q2Y	*	14.25	0.37	0.57	13.02	-0.66	-1.02	MC
WVNNAC		14.18	0.29	0.45	13.53	-0.15	-0.23	MC
XN8DUU		14.18	0.29	0.45	14.04	0.36	0.56	ME
Z2497R		12.72	-1.16	-1.79	12.58	-1.09	-1.70	MC
Z2UQB8		14.28	0.40	0.61	14.20	0.52	0.81	MC

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WebCode	Data Flag	Sample X85-X86 Lab Mean	Diff from Grand Mean	CPV	Sample X87-X88 Lab Mean	Diff from Grand Mean	CPV	Instr Code
Z3HVGE		14.06	0.17	0.26	13.72	0.04	0.07	MM
Z7LTGT		13.45	-0.44	-0.67	13.47	-0.21	-0.33	MD
ZYLGHB		12.51	-1.38	-2.13	12.33	-1.35	-2.09	MC

Summary Statistics

	Sample X85-X86	Sample X87-X88
Grand Means	13.883 lbf.in	13.678 lbf.in
Stnd Dev Btwn Labs	0.648 lbf.in	0.643 lbf.in

Statistics based on 40 of 41 reporting participants

Summary Statistics in SI Units

	Sample X85-X86	Sample X87-X88
Grand Means	15.686 dN.m	15.454 dN.m
Stnd Dev Btwn Labs	0.732 dN.m	0.726 dN.m

Statistics based on 40 of 41 reporting participants

Samples X85-X86: EPDM compound, batch #1 & X87-X88: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #689

E9DBA8 (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	TP	Tech Pro MDR model MDPT
XX	Instrument model not specified by lab		

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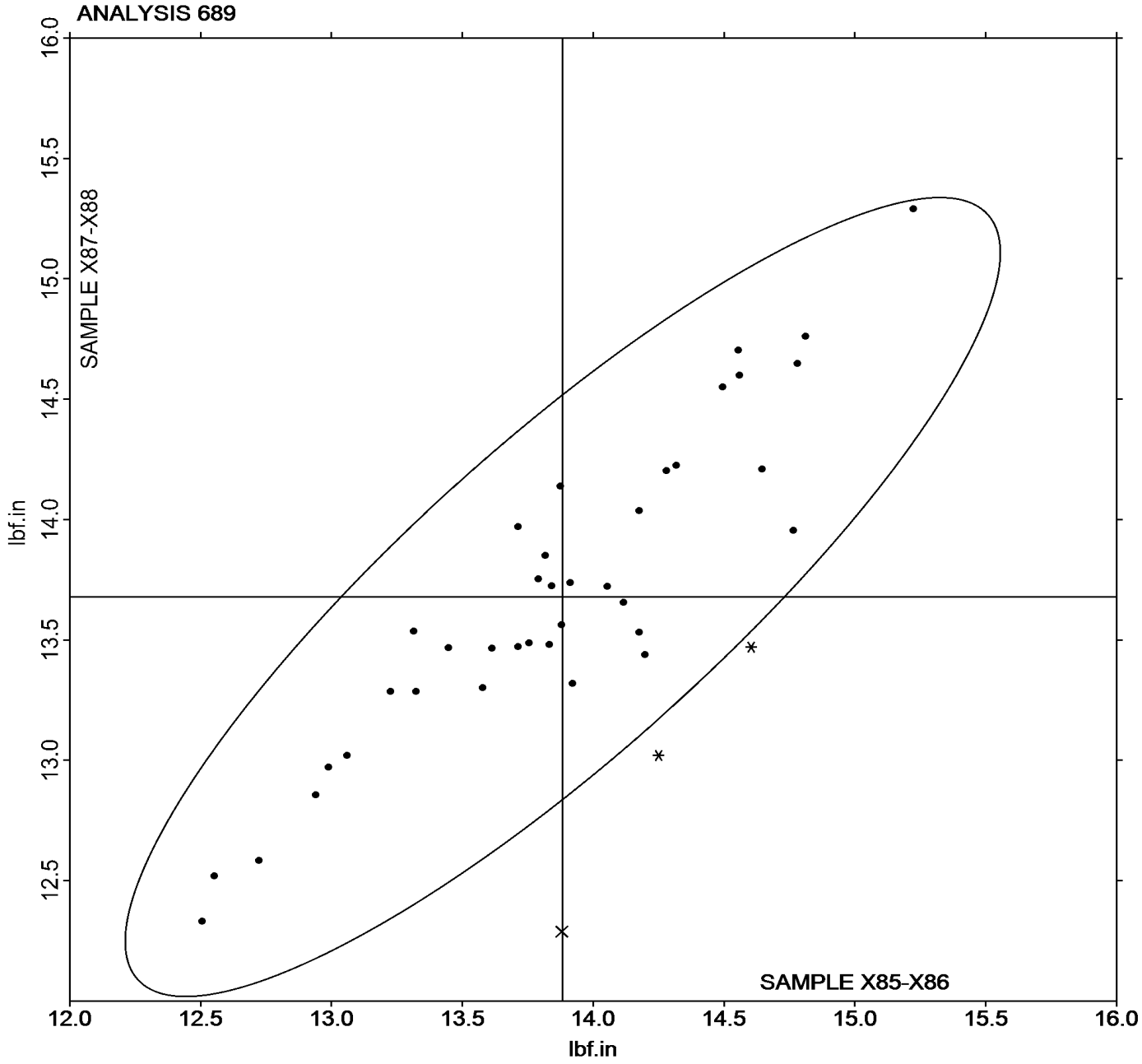
Grand Mean Sample **X85-X86** = 13.883 lbf.in

Grand Mean Sample **X87-X88** = 13.678 lbf.in



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WebCode	Data Flag	Sample F81-F82 Lab Mean	Diff from Grand Mean	CPV	Sample F83-F84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		470.8	-25.4	-0.62	488.2	-24.8	-0.58	RP
BA8JUR		480.5	-15.7	-0.38	499.1	-13.9	-0.33	XX
EJZY9L		465.4	-30.8	-0.75	471.3	-41.7	-0.98	RP
F8PQ8E		538.4	42.2	1.02	556.6	43.5	1.02	XX
K9W94U		445.2	-51.0	-1.24	466.2	-46.9	-1.10	XX
NP263F		517.7	21.5	0.52	535.2	22.1	0.52	PP
Z3HVGE		555.5	59.3	1.44	574.7	61.6	1.44	XX

Summary Statistics

	Sample F81-F82	Sample F83-F84
Grand Means	496.19 kPa	513.03 kPa
Stnd Dev Btwn Labs	41.24 kPa	42.68 kPa

Statistics based on 7 of 7 reporting participants

Samples F81-F82: EPDM compound, batch #1 & F83-F84: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PP	PPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

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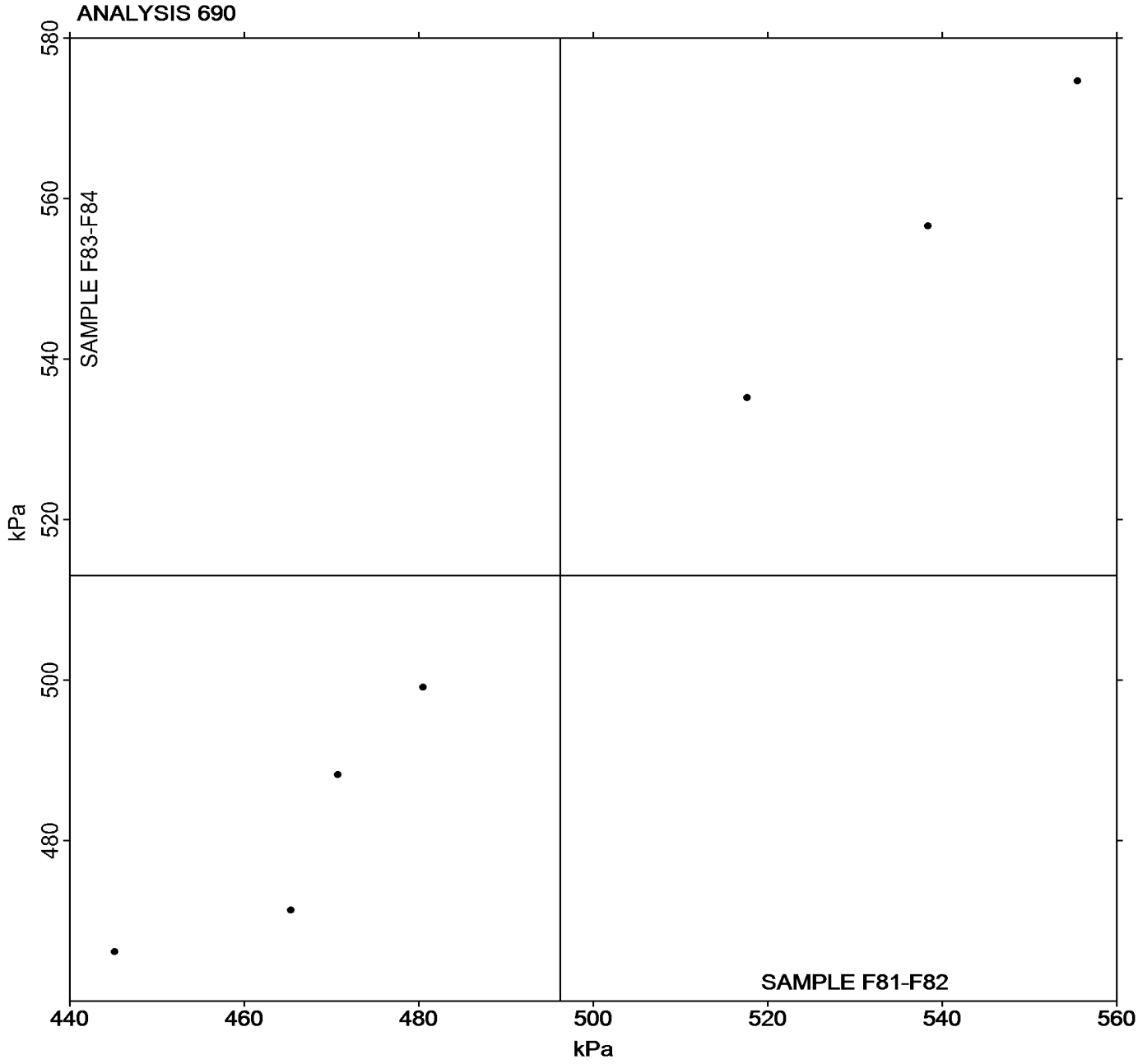
Grand Mean Sample **F81-F82** = 496.19 kPa

Grand Mean Sample **F83-F84** = 513.03 kPa



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RPA Rheological Properties: Part A - G" at 20Hz (kPa)

WebCode	Data Flag	Sample F81-F82 Lab Mean	Sample F81-F82 Diff from Grand Mean	Sample F81-F82 CPV	Sample F83-F84 Lab Mean	Sample F83-F84 Diff from Grand Mean	Sample F83-F84 CPV	Instr Code
29YTKR		202.5	10.9	0.66	205.2	11.0	0.65	RP
BA8JUR		203.9	12.2	0.74	207.2	13.0	0.77	XX
EJZY9L		192.4	0.7	0.04	198.2	4.1	0.24	RP
F8PQ8E		183.8	-7.9	-0.48	184.7	-9.5	-0.56	XX
K9W94U		178.5	-13.2	-0.80	180.5	-13.7	-0.81	XX
NP263F		213.8	22.2	1.35	215.5	21.3	1.26	PP
Z3HVGE		166.8	-24.8	-1.52	168.1	-26.1	-1.54	XX

Summary Statistics

	Sample F81-F82	Sample F83-F84
Grand Means	191.68 kPa	194.18 kPa
Stnd Dev Btwn Labs	16.38 kPa	16.93 kPa

Statistics based on 7 of 7 reporting participants

Samples F81-F82: EPDM compound, batch #1 & F83-F84: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PP	PPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

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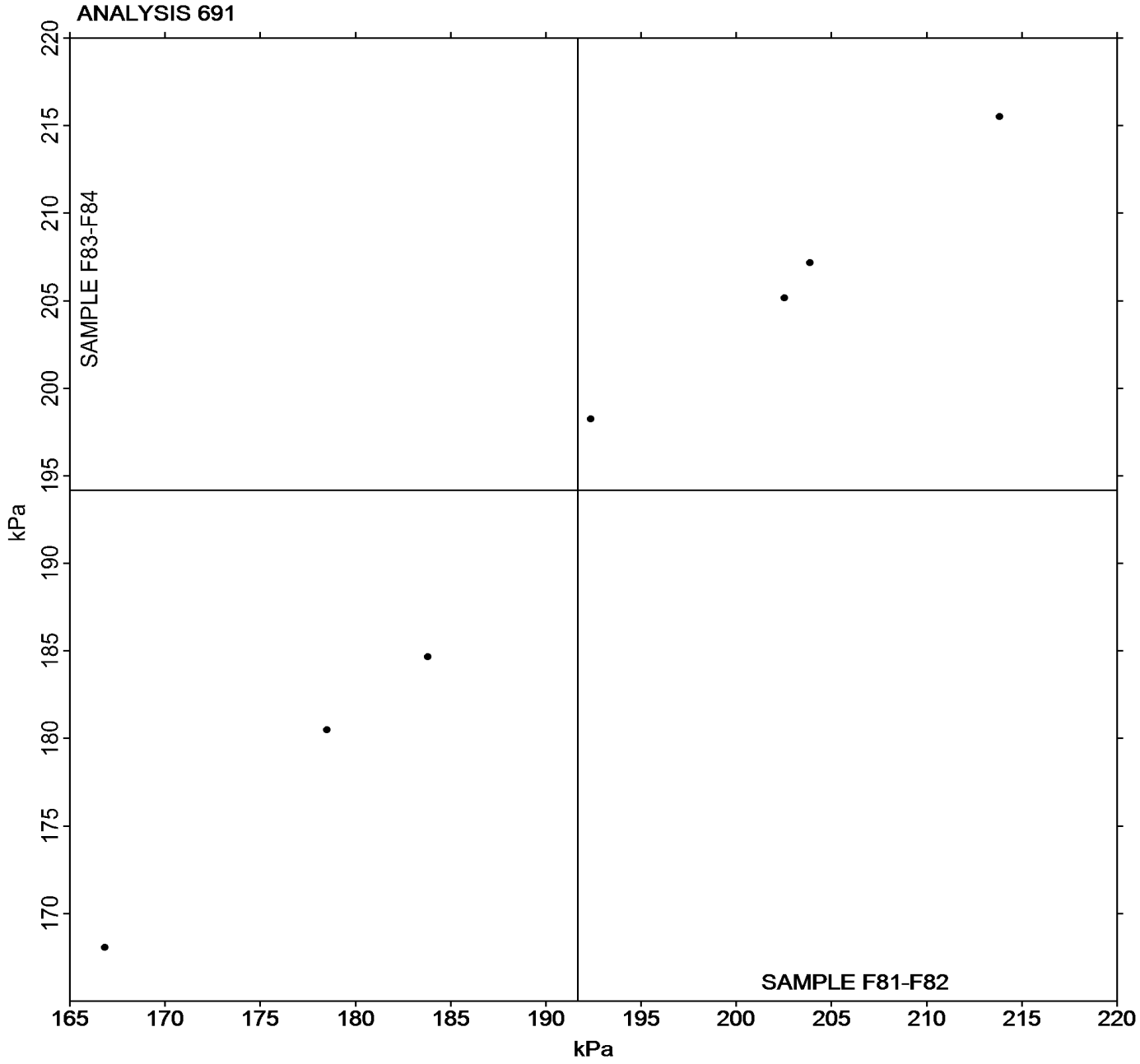
Grand Mean Sample **F81-F82** = 191.68 kPa

Grand Mean Sample **F83-F84** = 194.18 kPa



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

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RPA Rheological Properties: Part B - G' at 1.0Hz (kPa)

WebCode	Data Flag	Sample F81-F82 Lab Mean	Sample F81-F82 Diff from Grand Mean	Sample F81-F82 CPV	Sample F83-F84 Lab Mean	Sample F83-F84 Diff from Grand Mean	Sample F83-F84 CPV	Instr Code
29YTKR		67.86	-15.23	-1.28	71.81	-16.04	-1.38	RP
BA8JUR		75.57	-7.52	-0.63	79.47	-8.38	-0.72	XX
EJZY9L		80.18	-2.91	-0.24	88.84	0.99	0.08	RP
F8PQ8E		85.60	2.51	0.21	89.68	1.83	0.16	XX
NP263F		86.46	3.37	0.28	91.12	3.27	0.28	PR
Z3HVGE		102.87	19.78	1.66	106.19	18.34	1.57	XX

Summary Statistics

	Sample F81-F82	Sample F83-F84
Grand Means	83.091 kPa	87.853 kPa
Stnd Dev Btwn Labs	11.882 kPa	11.654 kPa

Statistics based on 6 of 6 reporting participants

Samples F81-F82: EPDM compound, batch #1 & F83-F84: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

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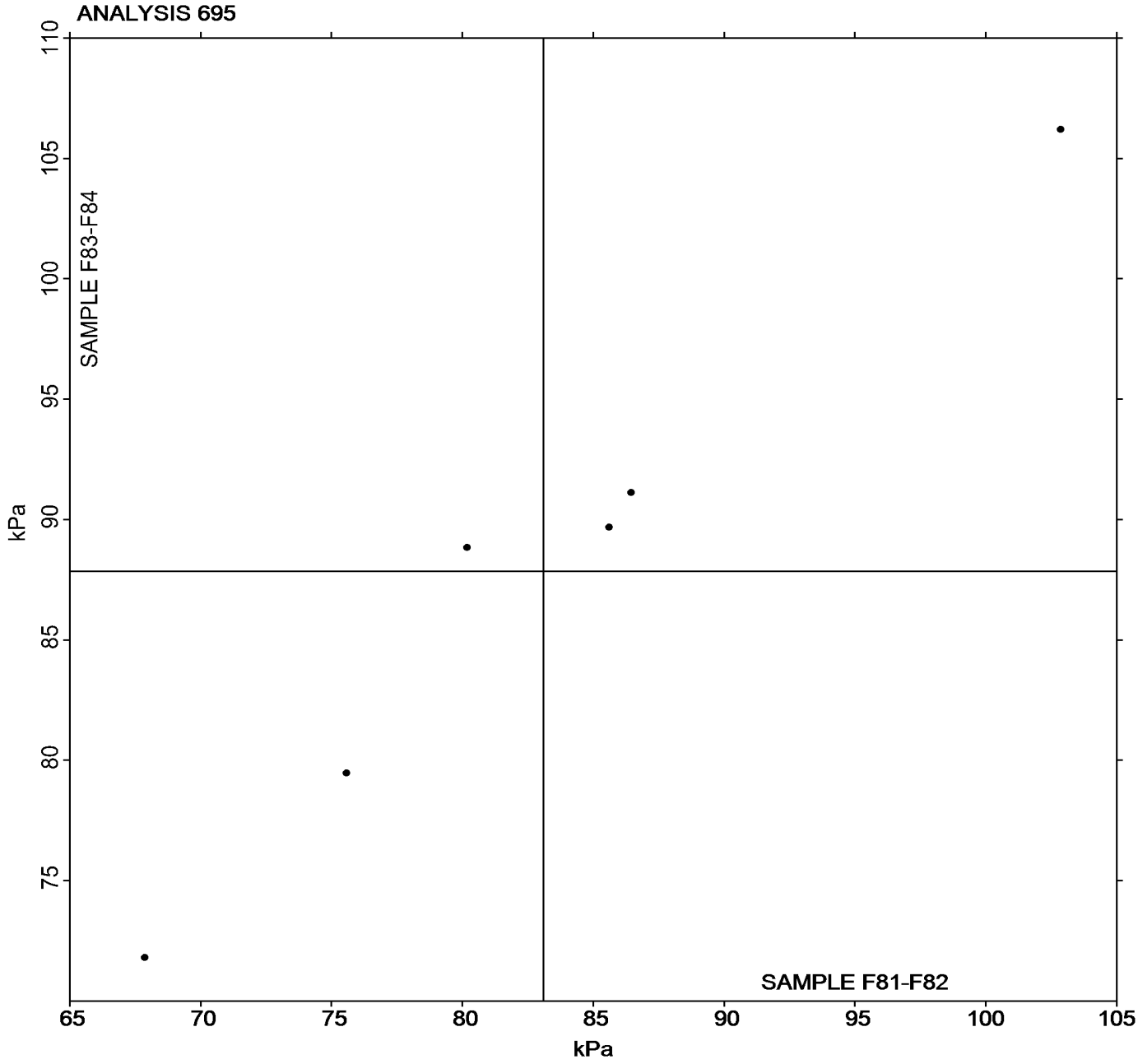
Grand Mean Sample **F81-F82** = 83.091 kPa

Grand Mean Sample **F83-F84** = 87.853 kPa



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RPA Rheological Properties: Part B - G" at 1.0Hz (kPa)

WebCode	Data Flag	Sample F81-F82 Lab Mean	Diff from Grand Mean	CPV	Sample F83-F84 Lab Mean	Diff from Grand Mean	CPV	Instr Code
29YTKR		65.23	-3.33	-0.97	66.96	-3.37	-0.91	RP
BA8JUR		68.63	0.07	0.02	70.49	0.16	0.04	XX
EJZY9L		63.72	-4.84	-1.41	65.07	-5.26	-1.42	RP
F8PQ8E		71.86	3.30	0.96	73.90	3.57	0.96	XX
NP263F		69.88	1.32	0.38	71.21	0.88	0.24	PP
Z3HVGE		72.05	3.49	1.01	74.34	4.01	1.08	XX

Summary Statistics

	Sample F81-F82	Sample F83-F84
Grand Means	68.559 kPa	70.328 kPa
Stnd Dev Btwn Labs	3.446 kPa	3.706 kPa

Statistics based on 6 of 6 reporting participants

Samples F81-F82: EPDM compound, batch #1 & F83-F84: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PP	PPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

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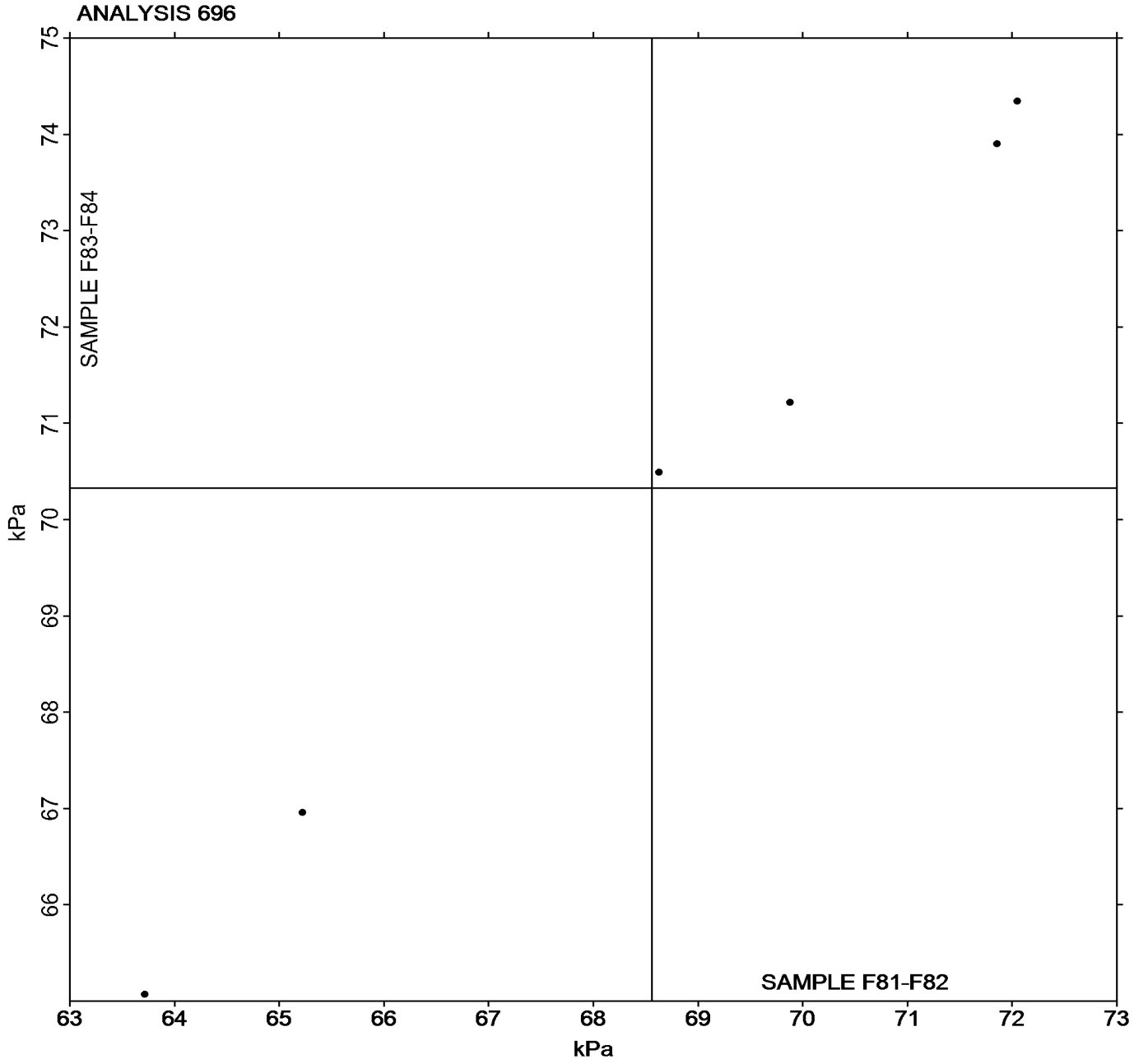
Grand Mean Sample **F81-F82** = 68.559 kPa

Grand Mean Sample **F83-F84** = 70.328 kPa



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-End of Report-

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