Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #164- 2nd Qtr 2010

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
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.: MaximumTorque

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. More than 2400 labs from the U.S., as well as more than 55 countries, currently participate in the 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.

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
24D3W2		3,196.0	-19.6	-0.10	3,179.0	-48.1	-0.27	ZZ
28GXF6		3,403.0	187.4	0.98	3,407.5	180.4	1.00	ZZ
29QXHQ		2,863.0	-352.6	-1.85	2,963.5	-263.6	-1.46	ZZ
2TVD23		2,808.5	-407.1	-2.13	2,876.5	-350.6	-1.94	ZZ
2XELBL		3,509.5	293.9	1.54	3,444.5	217.4	1.21	ZZ
3F8TXH	*	2,872.5	-343.1	-1.80	2,778.0	-449.1	-2.49	ZZ
6E9A84		3,048.5	-167.1	-0.87	3,218.0	-9.1	-0.05	ZZ
6FLUZB		3,089.0	-126.6	-0.66	3,077.5	-149.6	-0.83	ZZ
6V6EYW		3,253.5	37.9	0.20	3,164.5	-62.6	-0.35	ZZ
72FPYW		3,646.0	430.4	2.25	3,528.5	301.4	1.67	ZZ
73WVNM	*	2,640.5	-575.1	-3.01	2,680.0	-547.1	-3.03	ZZ
7NUC4A		3,324.3	108.7	0.57	3,235.1	8.0	0.04	ZZ
7Q2LZD		3,217.5	1.9	0.01	3,190.0	-37.1	-0.21	ZZ
7VPV8J		3,420.6	205.0	1.07	3,377.6	150.5	0.83	ZZ
7YVRUE		3,359.0	143.4	0.75	3,331.0	103.9	0.58	ZZ
892Z7X		3,342.5	126.9	0.66	3,444.5	217.4	1.21	ZZ
8A7YBR		3,455.6	240.0	1.26	3,417.4	190.3	1.06	ZZ
8MDECA		3,201.0	-14.6	-0.08	3,190.1	-37.0	-0.20	ZZ
9EKG7M	*	3,082.1	-133.5	-0.70	3,292.4	65.3	0.36	ZZ
9XETWD		3,125.6	-90.0	-0.47	3,096.6	-130.5	-0.72	ZZ
ABU9ZB		3,222.1	6.5	0.03	3,120.4	-106.7	-0.59	ZZ
ACHYT3		3,227.1	11.5	0.06	3,306.9	79.8	0.44	ZZ
ACJMHU		2,972.5	-243.1	-1.27	3,056.0	-171.1	-0.95	ZZ
AFVKP6		3,440.3	224.7	1.18	3,474.4	247.3	1.37	ZZ
AU7LLU		3,217.5	1.9	0.01	3,260.6	33.5	0.19	ZZ
BCKPV6		3,136.1	-79.5	-0.42	3,258.1	31.0	0.17	ZZ
BCUFQW		3,081.5	-134.1	-0.70	3,169.0	-58.1	-0.32	ZZ
BL78YC		3,483.0	267.4	1.40	3,465.5	238.4	1.32	ZZ
BXWTBB		3,217.4	1.8	0.01	3,292.6	65.5	0.36	ZZ
BYWDD	*	3,034.5	-181.1	-0.95	2,889.0	-338.1	-1.87	ZZ
C24F6J		3,292.4	76.8	0.40	3,422.9	195.8	1.09	ZZ
C7TDMA		3,584.5	368.9	1.93	3,645.5	418.4	2.32	ZZ
CAC23K		3,097.5	-118.1	-0.62	3,128.5	-98.6	-0.55	ZZ
CMG6DV		3,145.5	-70.1	-0.37	3,206.0	-21.1	-0.12	ZZ
CVWFQ2		3,292.4	76.8	0.40	3,256.1	29.0	0.16	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
DE8289		3,288.5	72.9	0.38	3,397.6	170.5	0.95	ZZ
DJUWDR		3,275.0	59.4	0.31	3,345.5	118.4	0.66	ZZ
EBP3CQ		3,086.9	-128.7	-0.67	3,195.0	-32.1	-0.18	ZZ
EWU97W	X	2,846.5	-369.1	-1.93	2,548.5	-678.6	-3.76	ZZ
F9446T		2,794.0	-421.6	-2.21	2,791.0	-436.1	-2.42	ZZ
F9B8VQ		3,267.0	51.4	0.27	3,186.5	-40.6	-0.23	ZZ
FCDFFN		3,194.3	-21.3	-0.11	3,136.0	-91.1	-0.51	ZZ
G9PWW		3,263.5	47.9	0.25	3,265.5	38.4	0.21	ZZ
H2QU2A		3,360.5	144.9	0.76	3,317.0	89.9	0.50	ZZ
H9JKCE		3,114.7	-100.9	-0.53	3,094.4	-132.7	-0.74	ZZ
HF9HFE		3,260.5	44.9	0.24	3,270.5	43.4	0.24	ZZ
HUTEY6		3,396.5	180.9	0.95	3,324.0	96.9	0.54	ZZ
HWUPA		3,040.5	-175.1	-0.92	3,116.5	-110.6	-0.61	ZZ
HX28UA		3,424.0	208.4	1.09	3,388.5	161.4	0.90	ZZ
J8JHYZ		3,205.0	-10.6	-0.06	3,260.5	33.4	0.19	ZZ
JANAVU		3,071.2	-144.4	-0.76	3,072.7	-154.4	-0.86	ZZ
JD46D8		3,172.0	-43.6	-0.23	3,148.0	-79.1	-0.44	ZZ
JXEEXH		3,108.2	-107.4	-0.56	3,059.6	-167.5	-0.93	ZZ
K4TQYN		3,265.8	50.2	0.26	3,420.0	192.9	1.07	ZZ
KMHC6L		3,434.5	218.9	1.15	3,427.5	200.4	1.11	ZZ
L7DW2Y	X	2,783.0	-432.6	-2.26	2,564.0	-663.1	-3.68	ZZ
LAH2YY		3,448.5	232.9	1.22	3,412.0	184.9	1.03	ZZ
LU293E		3,332.0	116.4	0.61	3,415.5	188.4	1.04	ZZ
M43EDL		3,058.5	-157.1	-0.82	3,163.5	-63.6	-0.35	ZZ
MGTBEJ	X	2,935.5	-280.1	-1.47	2,725.0	-502.1	-2.78	ZZ
N6H78F		3,063.7	-151.9	-0.80	3,002.3	-224.8	-1.25	ZZ
N7QM7G		3,496.5	280.9	1.47	3,460.0	232.9	1.29	ZZ
NAVAZX		3,238.5	22.9	0.12	3,238.5	11.4	0.06	ZZ
NBTJ8M		3,205.0	-10.6	-0.06	3,300.0	72.9	0.40	ZZ
NFBGCN		3,178.5	-37.1	-0.19	3,197.0	-30.1	-0.17	ZZ
NMUT6X		3,075.5	-140.1	-0.73	3,064.5	-162.6	-0.90	ZZ
NVJHPE		3,322.5	106.9	0.56	3,270.5	43.4	0.24	ZZ
NVNXC7		3,372.3	156.8	0.82	3,309.8	82.7	0.46	ZZ
P3FV7T		3,542.5	326.9	1.71	3,473.0	245.9	1.36	ZZ
P3RRAC		3,143.7	-71.9	-0.38	3,271.4	44.3	0.25	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
P467XL		3,138.0	-77.6	-0.41	3,207.5	-19.6	-0.11	ZZ
P7AUEW		3,203.5	-12.1	-0.06	3,265.0	37.9	0.21	ZZ
PAR632		2,903.0	-312.6	-1.64	2,985.6	-241.5	-1.34	ZZ
PYWZ42		3,012.4	-203.2	-1.06	3,118.6	-108.5	-0.60	ZZ
Q27L8Z		2,855.8	-359.8	-1.88	2,899.3	-327.8	-1.82	ZZ
Q9BDK4		3,318.0	102.4	0.54	3,415.0	187.9	1.04	ZZ
QEBDLC		3,422.5	206.9	1.08	3,385.0	157.9	0.88	ZZ
QMBEX6		3,082.1	-133.5	-0.70	3,190.9	-36.2	-0.20	ZZ
R8HNB9		3,471.5	255.9	1.34	3,427.5	200.4	1.11	ZZ
RDX9GM		3,343.5	127.9	0.67	3,331.0	103.9	0.58	ZZ
RMMPC		2,763.0	-452.6	-2.37	2,839.1	-387.9	-2.15	ZZ
T2GRBZ		3,281.5	65.9	0.35	3,173.5	-53.6	-0.30	ZZ
TJHJC2		3,142.5	-73.1	-0.38	3,140.0	-87.1	-0.48	ZZ
TLHWPU		3,529.9	314.3	1.65	3,532.4	305.3	1.69	ZZ
TXL9L3		3,252.0	36.4	0.19	3,238.0	10.9	0.06	ZZ
UEEVNJ		3,017.0	-198.6	-1.04	3,223.0	-4.1	-0.02	ZZ
UNXEZ4		3,284.5	68.9	0.36	3,285.0	57.9	0.32	ZZ
URZUCU		3,117.1	-98.5	-0.52	3,256.8	29.7	0.16	ZZ
VFR7F6		3,185.5	-30.1	-0.16	3,069.0	-158.1	-0.88	ZZ
VYXJUK		3,410.6	195.0	1.02	3,453.4	226.3	1.25	ZZ
W4BWB		3,197.5	-18.1	-0.09	3,199.5	-27.6	-0.15	ZZ
W9UM4Y		3,144.0	-71.6	-0.37	3,136.5	-90.6	-0.50	ZZ
X6FCXZ		3,339.0	123.4	0.65	3,326.5	99.4	0.55	ZZ
X9PP9V		3,529.2	313.6	1.64	3,519.7	292.6	1.62	ZZ
XLGBRV		3,093.0	-122.6	-0.64	3,092.2	-134.9	-0.75	ZZ
Y2ARAL		3,220.0	4.4	0.02	3,157.0	-70.1	-0.39	ZZ
YBWQZ	*	3,221.1	5.5	0.03	3,021.7	-205.4	-1.14	ZZ
YWK8JB	X	1,889.5	-1,326.1	-6.94	1,899.5	-1,327.6	-7.36	ZZ
YXZFYQ		3,384.0	168.4	0.88	3,265.0	37.9	0.21	ZZ
Z36PEX		3,017.0	-198.6	-1.04	3,038.5	-188.6	-1.05	ZZ
ZTX84A		3,230.0	14.4	0.08	3,197.4	-29.7	-0.16	ZZ
ZYWF6P	X	954.5	-2,261.1	-11.83	1,008.8	-2,218.3	-12.30	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Summary Statistics

Grand Means	3,215.58 psi	3,227.09 psi
Stnd Dev Btwn Labs	191.08 psi	180.32 psi

Statistics based on 97 of 102 reporting participants

Summary Statistics in SI Units

Grand Means	22.170 MPa	22.25 MPa
Stnd Dev Btwn Labs	1.317 MPa	1.24 MPa

Statistics based on 97 of 102 reporting participants

Samples B01-B02: Polyisoprene compound, batch #1 & B03-B04: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #605

EWU97W (X) - Data for Sample set B03-B04 are low. Also inconsistent in testing within Sample set B01-B02.

L7DW2Y (X) - Data for Sample set B03-B04 are low. Also inconsistent in testing within Sample set B01-B02.

MGTBEJ (X) - Data for Sample set B03-B04 are low. Lab indicated reaching the machine limit for the samples.

YWK8JB (X) - Data for all Samples are low. Lab indicated reaching the machine limit.

ZYWF6P (X) - Data for all Samples are low.

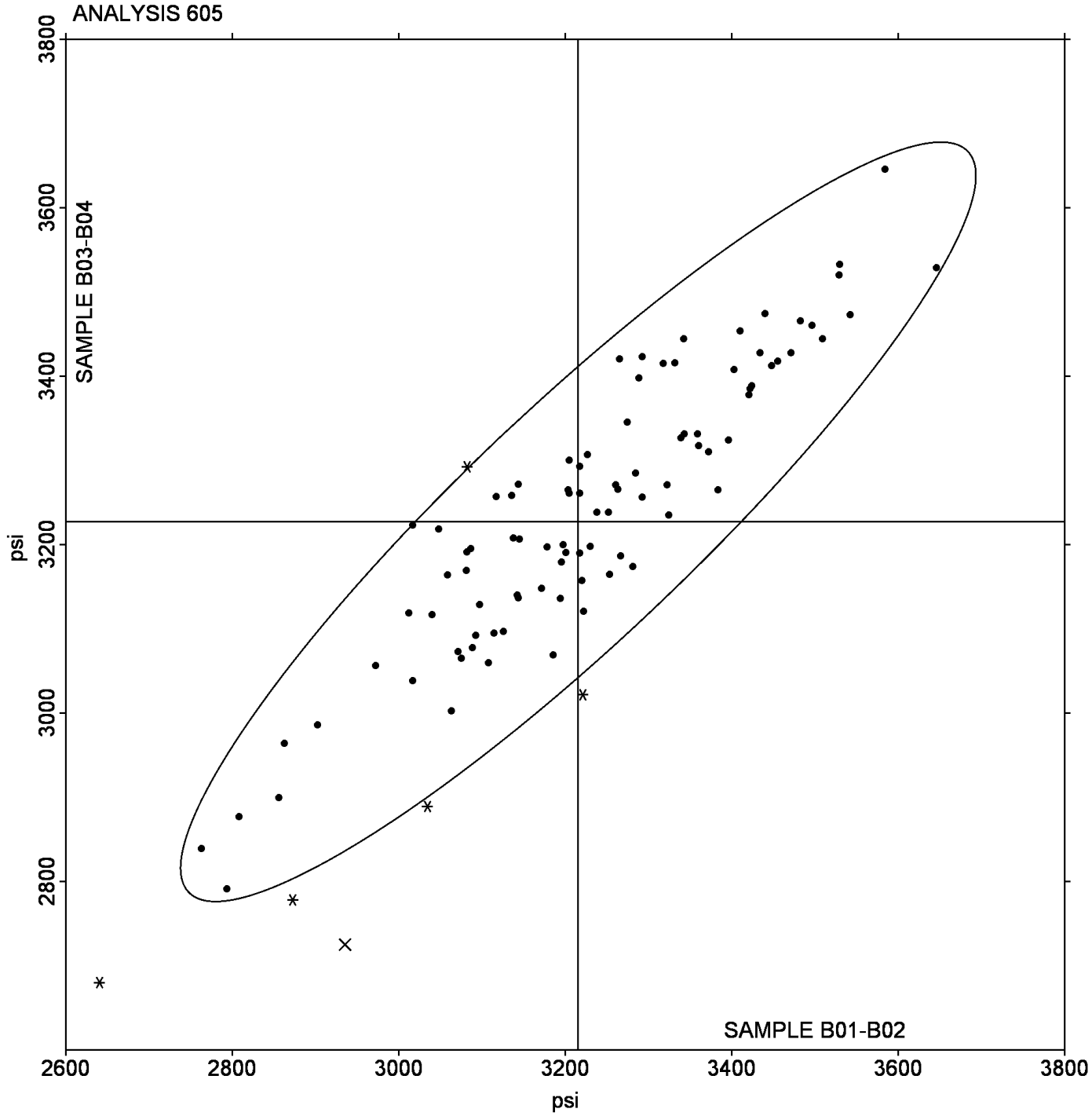
Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Grand Mean Sample **B01-B02** = 3,215.58 psi

Grand Mean Sample **B03-B04** = 3,227.09 psi



Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
2KZF87		577.0	-47.8	-1.56	590.5	-38.5	-1.24	ZZ
2TZBD6		606.5	-18.3	-0.60	635.5	6.5	0.21	ZZ
3AJ77Z		624.5	-0.3	-0.01	623.0	-6.0	-0.19	ZZ
3QTBUJ		651.5	26.7	0.87	657.0	28.0	0.90	ZZ
3THLYH		613.5	-11.3	-0.37	616.5	-12.5	-0.40	ZZ
3V2UVW	X	497.0	-127.8	-4.16	512.0	-117.0	-3.76	ZZ
3WN2Q7	*	701.8	76.9	2.50	706.5	77.5	2.49	ZZ
4LLZQ8		592.5	-32.3	-1.05	592.5	-36.5	-1.17	ZZ
4VCYPM		613.5	-11.3	-0.37	628.5	-0.5	-0.02	ZZ
4ZR69K		627.5	2.7	0.09	616.0	-13.0	-0.42	ZZ
6DDZHD		653.0	28.2	0.92	638.0	9.0	0.29	ZZ
6EVMW		619.5	-5.3	-0.17	621.0	-8.0	-0.26	ZZ
7NGB6Y		609.5	-15.3	-0.50	610.0	-19.0	-0.61	ZZ
7UXM8E		641.7	16.8	0.55	631.7	2.7	0.09	ZZ
7XGE4W		601.5	-23.3	-0.76	630.5	1.5	0.05	ZZ
7YLGW2		643.0	18.2	0.59	651.5	22.5	0.72	ZZ
8HYEXB	*	696.5	71.7	2.33	680.5	51.5	1.65	ZZ
8NE4VY		589.0	-35.8	-1.17	584.5	-44.5	-1.43	ZZ
93ED8C		628.4	3.5	0.11	643.9	14.9	0.48	ZZ
9B43QT		639.0	14.2	0.46	649.0	20.0	0.64	ZZ
9LACHX		594.5	-30.3	-0.99	616.0	-13.0	-0.42	ZZ
9XRNXL		624.0	-0.8	-0.03	626.0	-3.0	-0.10	ZZ
A3L4FE		603.9	-20.9	-0.68	603.6	-25.4	-0.82	ZZ
ANFXPH		610.5	-14.3	-0.47	620.0	-9.0	-0.29	ZZ
AP3VYL		638.0	13.2	0.43	648.0	19.0	0.61	ZZ
AYBFEC		648.2	23.4	0.76	645.7	16.7	0.54	ZZ
BB93C6		623.5	-1.3	-0.04	642.0	13.0	0.42	ZZ
BMH32Q		628.5	3.7	0.12	635.5	6.5	0.21	ZZ
BQDFKN		612.5	-12.3	-0.40	600.0	-29.0	-0.93	ZZ
BRXNVJ	X	691.5	66.7	2.17	639.0	10.0	0.32	ZZ
BXFKGE		621.3	-3.6	-0.12	633.8	4.8	0.15	ZZ
C2F7PW		670.5	45.7	1.49	684.5	55.5	1.78	ZZ
CFKTAR		621.5	-3.3	-0.11	623.5	-5.5	-0.18	ZZ
CFTH6J		607.0	-17.8	-0.58	603.0	-26.0	-0.84	ZZ
D4AE7X		616.5	-8.3	-0.27	633.0	4.0	0.13	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
D767JH		639.5	14.7	0.48	634.0	5.0	0.16	ZZ
D9U3YG		626.5	1.7	0.05	631.5	2.5	0.08	ZZ
E76TQ2		613.5	-11.3	-0.37	611.5	-17.5	-0.56	ZZ
E9D6JN		589.5	-35.4	-1.15	597.5	-31.5	-1.01	ZZ
ECV3E7		627.5	2.7	0.09	627.0	-2.0	-0.06	ZZ
EELD6Y		627.5	2.7	0.09	634.0	5.0	0.16	ZZ
EMHHHE		669.6	44.8	1.46	673.8	44.8	1.44	ZZ
F7EUWC		605.0	-19.8	-0.65	634.0	5.0	0.16	ZZ
FBLCQM	X	329.5	-295.3	-9.61	326.0	-303.0	-9.73	ZZ
FJH82Q	X	596.0	-28.8	-0.94	559.0	-70.0	-2.25	ZZ
FMJ7KV	*	554.0	-70.8	-2.30	543.0	-86.0	-2.76	ZZ
FQCGRP		641.5	16.7	0.54	657.5	28.5	0.92	ZZ
FY3224		641.0	16.2	0.53	641.5	12.5	0.40	ZZ
G9KVVC	X	515.0	-109.8	-3.57	520.0	-109.0	-3.50	ZZ
GHXVJL		650.5	25.7	0.83	648.0	19.0	0.61	ZZ
GL4727		656.0	31.2	1.01	639.0	10.0	0.32	ZZ
GMB99R		616.5	-8.3	-0.27	613.0	-16.0	-0.51	ZZ
H22T3K		593.5	-31.3	-1.02	587.5	-41.5	-1.33	ZZ
H44H4F		687.5	62.7	2.04	687.5	58.5	1.88	ZZ
JBZ98B		622.5	-2.3	-0.08	624.0	-5.0	-0.16	ZZ
JC3FUH		613.0	-11.8	-0.39	615.5	-13.5	-0.43	ZZ
JJK9ZU		681.0	56.2	1.83	685.0	56.0	1.80	ZZ
JMKKW		700.0	75.2	2.44	700.0	71.0	2.28	ZZ
JNKBNU		596.5	-28.3	-0.92	597.0	-32.0	-1.03	ZZ
JUW8HW		620.5	-4.3	-0.14	637.2	8.2	0.26	ZZ
K2KZXU	X	595.0	-29.8	-0.97	635.0	6.0	0.19	ZZ
L44HAC		626.5	1.7	0.05	613.0	-16.0	-0.51	ZZ
LE8JXH		666.5	41.7	1.35	673.0	44.0	1.41	ZZ
LXW8W		640.0	15.1	0.49	661.8	32.8	1.05	ZZ
M8MCW		649.5	24.7	0.80	658.0	29.0	0.93	ZZ
MELV9F		637.5	12.7	0.41	641.0	12.0	0.39	ZZ
MEY3YH		597.7	-27.1	-0.88	591.1	-37.9	-1.22	ZZ
MMPUA		625.5	0.7	0.02	636.5	7.5	0.24	ZZ
NAZ42X		610.5	-14.3	-0.47	607.0	-22.0	-0.71	ZZ
P42A2A		584.5	-40.3	-1.31	588.0	-41.0	-1.32	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
P9BJ7Y		624.5	-0.3	-0.01	624.5	-4.5	-0.14	ZZ
Q94BDH		612.0	-12.8	-0.42	620.0	-9.0	-0.29	ZZ
QC34NN	X	663.5	38.7	1.26	624.5	-4.5	-0.14	ZZ
QWFYM		610.0	-14.8	-0.48	628.0	-1.0	-0.03	ZZ
RRXRED		643.0	18.2	0.59	647.5	18.5	0.59	ZZ
RUG4QM	X	641.5	16.7	0.54	607.5	-21.5	-0.69	ZZ
TNTRJY		656.1	31.3	1.02	652.2	23.2	0.75	ZZ
U3RCV2		575.7	-49.2	-1.60	588.3	-40.7	-1.31	ZZ
UDZTYT		595.2	-29.6	-0.96	612.1	-16.9	-0.54	ZZ
UJ7NHT		609.8	-15.0	-0.49	595.0	-34.0	-1.09	ZZ
UL6Z2M		619.6	-5.3	-0.17	618.2	-10.8	-0.35	ZZ
UNNLPF		568.0	-56.8	-1.85	575.0	-54.0	-1.73	ZZ
UP27HQ	X	512.4	-112.4	-3.66	481.5	-147.5	-4.74	ZZ
UUQT6J		570.0	-54.8	-1.78	570.0	-59.0	-1.90	ZZ
VAVMW	X	352.0	-272.9	-8.88	352.8	-276.2	-8.87	ZZ
VWVQ2		615.0	-9.8	-0.32	615.0	-14.0	-0.45	ZZ
WAZ43W		680.9	56.1	1.82	669.8	40.8	1.31	ZZ
WCQFTP		667.5	42.7	1.39	671.0	42.0	1.35	ZZ
WDYR97		572.5	-52.3	-1.70	592.0	-37.0	-1.19	ZZ
WEFXE3		570.5	-54.3	-1.77	569.8	-59.2	-1.90	ZZ
WGQ4N		574.5	-50.3	-1.64	567.0	-62.0	-1.99	ZZ
WKM7H6	X	632.0	7.2	0.23	588.0	-41.0	-1.32	ZZ
WUGMJE		622.0	-2.8	-0.09	622.0	-7.0	-0.22	ZZ
WZ2UQL		653.5	28.7	0.93	651.0	22.0	0.71	ZZ
X9MHYU		644.0	19.2	0.62	657.5	28.5	0.92	ZZ
XHNZ7X		656.0	31.2	1.01	665.5	36.5	1.17	ZZ
YLAJYD		608.0	-16.8	-0.55	614.0	-15.0	-0.48	ZZ
YMZUQ7		626.5	1.7	0.05	630.0	1.0	0.03	ZZ
YV4WNZ		641.0	16.2	0.53	654.0	25.0	0.80	ZZ
Z6Y8Y8	X	542.0	-82.8	-2.69	586.0	-43.0	-1.38	ZZ
ZW9GXY		634.5	9.7	0.31	662.0	33.0	1.06	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Summary Statistics

Grand Means	624.84 percent	629.00 percent
Stnd Dev Btwn Labs	30.75 percent	31.13 percent

Statistics based on 89 of 101 reporting participants

Samples B01-B02: Polyisoprene compound, batch #1 & B03-B04: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #606

3V2UVW (X) - Data for all Samples are low.

BRXNVJ (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within both Sample Sets.

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

FJH82Q (X) - Inconsistency in testing between Sample sets.

G9KVVC (X) - Data for all Samples are low. Possible Systematic Error.

K2KZXU (X) - Inconsistency in testing between Sample sets.

QC34NN (X) - Inconsistency in testing between Sample sets.

RUG4QM (X) - Inconsistency in testing between Sample sets.

UP27HQ (X) - Data for all Samples are low.

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

WKM7H6 (X) - Inconsistency in testing between Sample sets.

Z6Y8Y8 (X) - Inconsistency in testing between Sample sets.

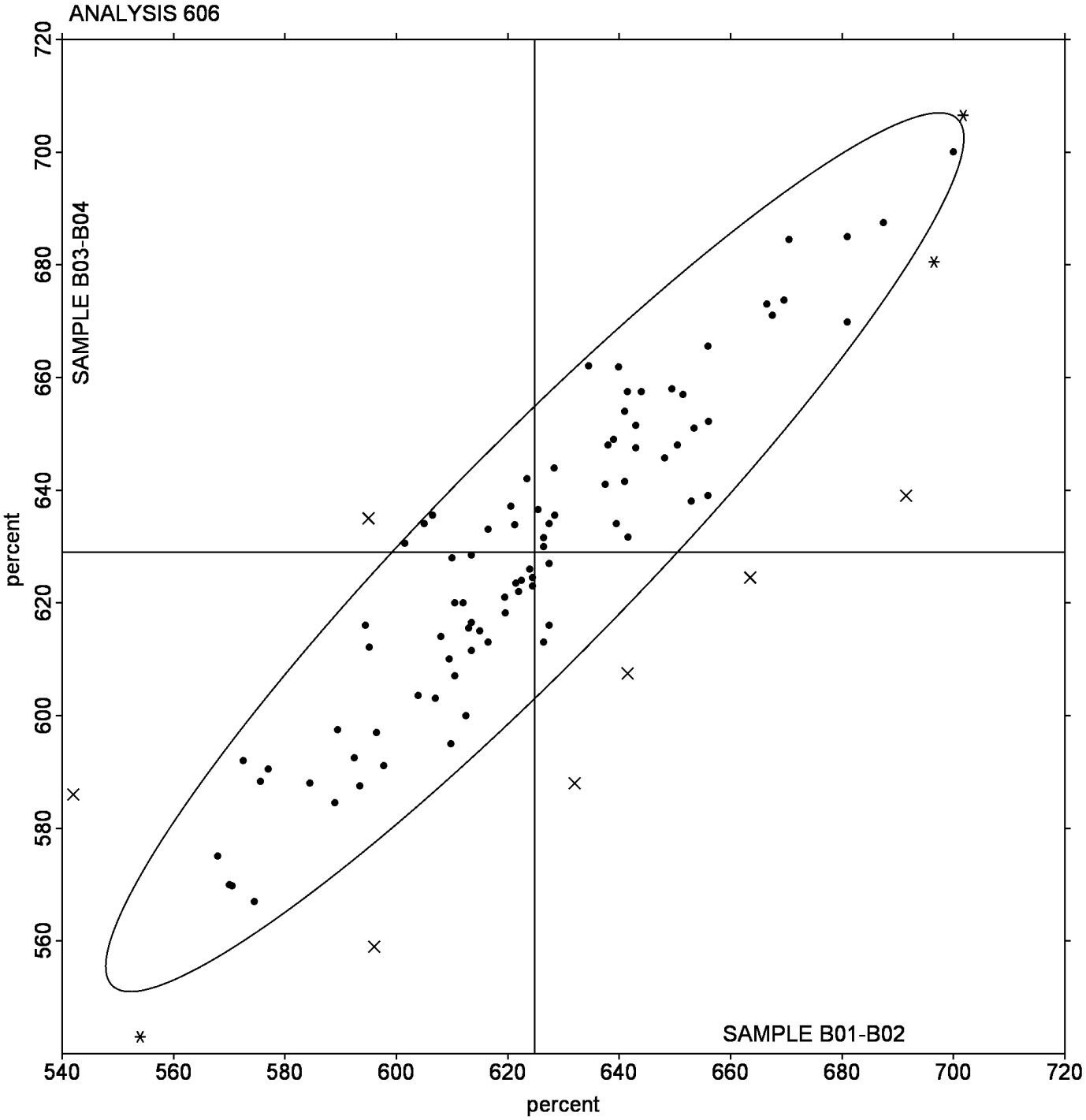
Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample **B01-B02** = 624.84 percent

Grand Mean Sample **B03-B04** = 629.00 percent



Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
2BZJC4		961.5	105.5	1.65	930.5	76.4	1.53	ZZ
2QE7LD		840.0	-16.0	-0.25	823.5	-30.6	-0.62	ZZ
3D8ZET	*	982.3	126.2	1.98	983.8	129.6	2.60	ZZ
3EPP6Z	X	2,686.5	1,830.5	28.69	2,746.0	1,891.9	38.01	ZZ
3FREQB		883.0	27.0	0.42	850.0	-4.1	-0.08	ZZ
3MUY7Y		750.6	-105.5	-1.65	820.9	-33.2	-0.67	ZZ
46AZPK		876.5	20.5	0.32	810.5	-43.6	-0.88	ZZ
47WEMN	*	992.5	136.5	2.14	877.5	23.4	0.47	ZZ
49YCHN		816.5	-39.6	-0.62	784.8	-69.4	-1.39	ZZ
4AGC3Q		977.3	121.2	1.90	911.1	56.9	1.14	ZZ
4CPAT2		785.5	-70.5	-1.11	774.0	-80.1	-1.61	ZZ
4WQ2ED	X	695.0	-161.0	-2.52	674.5	-179.6	-3.61	ZZ
6ELZUT		883.5	27.5	0.43	899.0	44.9	0.90	ZZ
6LBWZA		892.7	36.7	0.58	872.4	18.3	0.37	ZZ
6TWPR2	*	1,002.5	146.5	2.30	973.5	119.4	2.40	ZZ
6WMWF	*	792.6	-63.4	-0.99	927.5	73.4	1.47	ZZ
6WQ7PH		788.0	-68.0	-1.07	764.0	-90.1	-1.81	ZZ
74UJGN		804.0	-52.0	-0.82	813.5	-40.6	-0.82	ZZ
78LG9U		865.0	9.0	0.14	889.0	34.9	0.70	ZZ
7B39F3		761.0	-95.0	-1.49	765.5	-88.6	-1.78	ZZ
92TZ7T		861.0	5.0	0.08	812.0	-42.1	-0.85	ZZ
96Z74Y		907.5	51.5	0.81	857.5	3.4	0.07	ZZ
9CNUY4	X	1,051.5	195.5	3.06	1,080.5	226.4	4.55	ZZ
9MDTD2		871.5	15.5	0.24	847.0	-7.1	-0.14	ZZ
9PJN4C		876.0	20.0	0.31	889.1	34.9	0.70	ZZ
9QLUQL		886.0	30.0	0.47	862.0	7.9	0.16	ZZ
9ZE3NJ		771.8	-84.2	-1.32	797.9	-56.3	-1.13	ZZ
A862BW	X	1,110.5	254.5	3.99	1,109.0	254.9	5.12	ZZ
AJU3KC		904.5	48.5	0.76	905.5	51.4	1.03	ZZ
ALCBGQ	X	1,177.0	321.0	5.03	1,158.1	304.0	6.11	ZZ
AZ9YLP	X	579.0	-277.0	-4.34	560.0	-294.1	-5.91	ZZ
BEL3BJ		814.0	-42.0	-0.66	848.0	-6.1	-0.12	ZZ
BFGCGU		856.5	0.5	0.01	876.5	22.4	0.45	ZZ
BNCFH4		790.4	-65.6	-1.03	858.1	4.0	0.08	ZZ
BYNEW		852.0	-4.0	-0.06	838.0	-16.1	-0.32	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
C2HVAJ		768.5	-87.5	-1.37	772.5	-81.6	-1.64	ZZ
CEDVD9		847.6	-8.4	-0.13	849.4	-4.8	-0.10	ZZ
CEQ7RM		950.5	94.5	1.48	878.0	23.9	0.48	ZZ
CQJLK4		822.0	-34.0	-0.53	847.0	-7.1	-0.14	ZZ
CWH9AJ		817.0	-39.0	-0.61	784.5	-69.6	-1.40	ZZ
CYGU82		864.9	8.9	0.14	870.3	16.2	0.33	ZZ
D2T6EE		833.5	-22.5	-0.35	841.5	-12.6	-0.25	ZZ
DHT63F		966.4	110.3	1.73	914.0	59.9	1.20	ZZ
E2HN7H		881.0	25.0	0.39	955.0	100.9	2.03	ZZ
EHAQDT		896.3	40.3	0.63	821.6	-32.5	-0.65	ZZ
EQNCM	*	658.5	-197.5	-3.10	748.5	-105.6	-2.12	ZZ
EWJ8UN		779.9	-76.1	-1.19	805.0	-49.1	-0.99	ZZ
FCL8TR		777.5	-78.5	-1.23	803.5	-50.6	-1.02	ZZ
FVERLB		873.9	17.8	0.28	905.0	50.9	1.02	ZZ
G4RX4Z		859.0	3.0	0.05	882.5	28.4	0.57	ZZ
GCA9NF		869.1	13.0	0.20	864.9	10.8	0.22	ZZ
GFCME		850.0	-6.0	-0.09	826.0	-28.1	-0.57	ZZ
GMKW8	*	695.5	-160.6	-2.52	826.7	-27.4	-0.55	ZZ
HBFQGD		818.6	-37.4	-0.59	871.8	17.7	0.36	ZZ
HCAZJ8		885.5	29.5	0.46	814.5	-39.6	-0.80	ZZ
HFWHX		856.0	0.0	0.00	825.5	-28.6	-0.58	ZZ
HGYL4F		858.0	2.0	0.03	840.0	-14.1	-0.28	ZZ
HP7329		872.5	16.5	0.26	824.5	-29.6	-0.60	ZZ
HRBTA9	X	1,107.5	251.5	3.94	1,071.0	216.9	4.36	ZZ
J2U2A3		853.6	-2.5	-0.04	823.8	-30.3	-0.61	ZZ
JRDNMD		720.3	-135.8	-2.13	774.7	-79.4	-1.60	ZZ
JRKN2L		879.0	23.0	0.36	911.0	56.9	1.14	ZZ
KBVN2Z		840.5	-15.6	-0.24	834.4	-19.7	-0.40	ZZ
KDKYTT		881.5	25.5	0.40	869.5	15.4	0.31	ZZ
KR8UGC		802.5	-53.5	-0.84	879.9	25.8	0.52	ZZ
KRKJ8H		888.1	32.1	0.50	899.7	45.5	0.91	ZZ
LEEYRG		850.7	-5.4	-0.08	906.5	52.4	1.05	ZZ
LR8PKL		899.2	43.2	0.68	845.9	-8.2	-0.16	ZZ
MA7LTN	*	936.5	80.5	1.26	976.0	121.9	2.45	ZZ
MJ3P77		803.5	-52.5	-0.82	798.0	-56.1	-1.13	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
ML8DNG		770.0	-86.0	-1.35	833.5	-20.6	-0.41	ZZ
MQVQ6Q		792.5	-63.5	-1.00	872.0	17.9	0.36	ZZ
MVEGXF		896.5	40.5	0.63	930.0	75.9	1.52	ZZ
NLLGZZ		881.0	25.0	0.39	862.5	8.4	0.17	ZZ
NRLT7Q		872.0	16.0	0.25	887.0	32.9	0.66	ZZ
Q4TUZT	X	1,084.8	228.7	3.58	1,197.0	342.9	6.89	ZZ
QUADF2		824.3	-31.8	-0.50	827.6	-26.6	-0.53	ZZ
QW37QA		875.5	19.5	0.31	851.0	-3.1	-0.06	ZZ
T2FYEE	X	633.8	-222.2	-3.48	630.2	-223.9	-4.50	ZZ
TGFGQ7		965.3	109.3	1.71	918.7	64.5	1.30	ZZ
TK9RC7		867.5	11.5	0.18	890.5	36.4	0.73	ZZ
UDB9ZZ		838.0	-18.0	-0.28	827.0	-27.1	-0.55	ZZ
UJBW9U		912.2	56.2	0.88	856.2	2.1	0.04	ZZ
UNBXJM		900.0	43.9	0.69	847.0	-7.1	-0.14	ZZ
V4M27B		891.5	35.5	0.56	823.5	-30.6	-0.62	ZZ
WTEQFP		881.0	25.0	0.39	935.0	80.9	1.62	ZZ
WVFQH9		841.5	-14.5	-0.23	804.0	-50.1	-1.01	ZZ
WXWHD		855.5	-0.5	-0.01	876.0	21.9	0.44	ZZ
X98QWG		840.8	-15.2	-0.24	823.8	-30.3	-0.61	ZZ
XHGCND		857.0	1.0	0.02	837.5	-16.6	-0.33	ZZ
YTFMFK		826.0	-30.0	-0.47	834.0	-20.1	-0.40	ZZ
YTU64Y		931.8	75.7	1.19	841.0	-13.1	-0.26	ZZ
Z2UMT2		826.0	-30.0	-0.47	807.5	-46.6	-0.94	ZZ
ZKVG27		935.5	79.5	1.25	875.5	21.4	0.43	ZZ
ZUW4FV		910.5	54.5	0.85	894.0	39.9	0.80	ZZ
ZV28VU		779.6	-76.4	-1.20	801.3	-52.8	-1.06	ZZ

Summary Statistics

	Sample B01-B02	Sample B03-B04
Grand Means	856.03 psi	854.14 psi
Stnd Dev Btwn Labs	63.80 psi	49.78 psi

Statistics based on 87 of 96 reporting participants

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Summary Statistics in SI Units

Grand Means	5.9021 MPa	5.89 MPa
Stnd Dev Btwn Labs	0.4399 MPa	0.34 MPa

Statistics based on 87 of 96 reporting participants

Samples B01-B02: Polyisoprene compound, batch #1 & B03-B04: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #607

3EPP6Z (X) - Data for all Samples are high.

4WQ2ED (X) - Data for Sample set B03-B04 are low.

9CNUY4 (X) - Data for all Samples are high.

A862BW (X) - Data for all Samples are high.

ALCBGQ (X) - Data for all Samples are high. Also inconsistent in testing within both Sample sets.

AZ9YLP (X) - Data for all Samples are low.

HRBTA9 (X) - Data for all Samples are high.

Q4TUZT (X) - Data for all Samples are high. Also inconsistent in testing within Sample set B01-B02.

T2FYEE (X) - Data for all Samples are low.

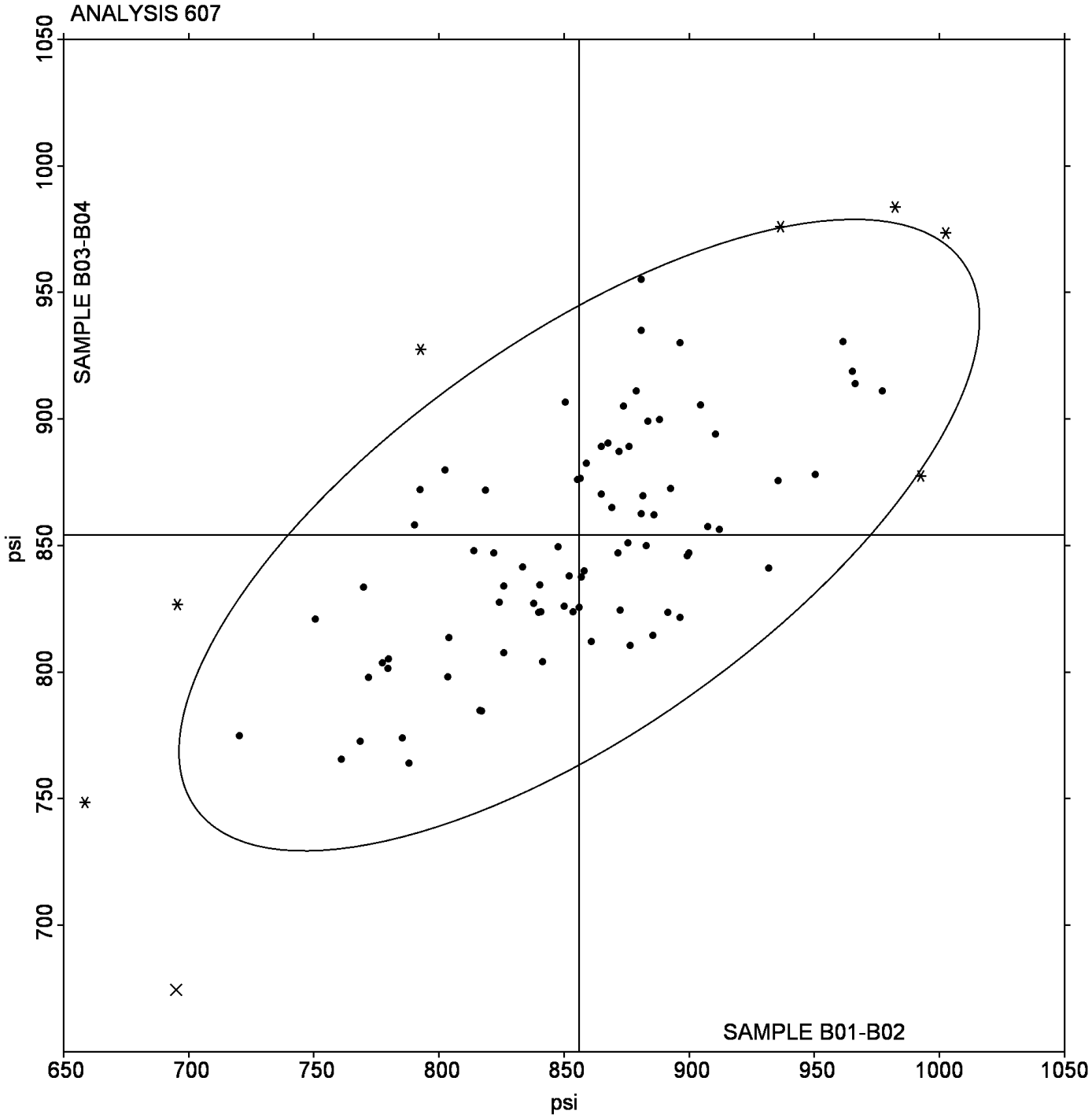
Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample **B01-B02** = 856.03 psi

Grand Mean Sample **B03-B04** = 854.14 psi



Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
29BPFF		184.9	1.2	0.11	186.4	1.7	0.18	ZZ
2TNF6J	X	234.0	50.2	4.93	236.5	51.8	5.47	ZZ
2V8P2X		185.6	1.9	0.18	186.4	1.7	0.18	ZZ
2WEDDA	*	196.0	12.2	1.20	209.0	24.3	2.57	ZZ
33AY3P		197.0	13.2	1.29	191.1	6.4	0.67	ZZ
33HXHK		172.0	-11.8	-1.16	183.0	-1.7	-0.18	ZZ
36DULR		187.1	3.3	0.33	185.3	0.6	0.06	ZZ
3RJ687		165.0	-18.8	-1.84	164.5	-20.2	-2.13	ZZ
67UGW6	X	265.5	81.7	8.02	152.5	-32.2	-3.40	ZZ
6WWXU		185.0	1.2	0.12	197.0	12.3	1.29	ZZ
7EF46E		178.5	-5.3	-0.52	175.0	-9.7	-1.02	ZZ
7FF46D	*	195.0	11.2	1.10	209.0	24.3	2.57	ZZ
83QZHL	*	158.8	-25.0	-2.45	175.5	-9.2	-0.97	ZZ
8K8L3N	*	212.5	28.7	2.82	211.0	26.3	2.78	ZZ
8LGKDY	*	158.0	-25.8	-2.53	165.0	-19.7	-2.08	ZZ
8QDP7P		197.4	13.6	1.34	186.7	2.0	0.22	ZZ
8QRPWM		191.0	7.2	0.71	188.0	3.3	0.35	ZZ
8R66EU		179.5	-4.3	-0.42	176.5	-8.2	-0.87	ZZ
ABCNPT		171.0	-12.8	-1.25	177.0	-7.7	-0.81	ZZ
AG9LHC		185.6	1.9	0.18	188.6	3.9	0.41	ZZ
APMLZU		174.5	-9.3	-0.91	179.8	-4.9	-0.52	ZZ
B3D6KW		176.2	-7.5	-0.74	178.4	-6.3	-0.67	ZZ
BAD8HN		187.5	3.7	0.37	192.0	7.3	0.77	ZZ
BNP4JV		180.5	-3.3	-0.32	176.5	-8.2	-0.87	ZZ
CEEAMH	X	248.6	64.8	6.36	247.8	63.1	6.66	ZZ
CTJWEJ		178.5	-5.3	-0.52	176.0	-8.7	-0.92	ZZ
D2PM8Z		167.6	-16.2	-1.59	178.1	-6.6	-0.70	ZZ
DF4VVY	X	506.0	322.2	31.63	553.0	368.3	38.90	ZZ
DHAQLA		189.5	5.7	0.56	180.5	-4.2	-0.44	ZZ
DP6HM		186.5	2.7	0.27	181.0	-3.7	-0.39	ZZ
E3TGVQ		188.0	4.2	0.42	186.0	1.3	0.14	ZZ
E6NDYX		191.5	7.7	0.76	190.5	5.8	0.61	ZZ
ENJTFQ		182.5	-1.3	-0.12	188.0	3.3	0.35	ZZ
ERRU4U		186.0	2.2	0.22	180.0	-4.7	-0.50	ZZ
FNLD4N	*	211.5	27.7	2.72	200.0	15.3	1.62	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
FQ64U8		182.0	-1.8	-0.17	181.0	-3.7	-0.39	ZZ
FX4JFM		185.5	1.7	0.17	191.5	6.8	0.72	ZZ
FZQP2B	X	283.0	99.2	9.74	268.0	83.3	8.80	ZZ
G4RYZJ		170.4	-13.3	-1.31	181.3	-3.4	-0.36	ZZ
GJ4HRJ		181.5	-2.3	-0.22	177.0	-7.7	-0.81	ZZ
GLN39Z		187.0	3.2	0.32	184.0	-0.7	-0.07	ZZ
GNZ6PD		173.6	-10.2	-1.00	180.6	-4.1	-0.43	ZZ
GUCNRX		180.5	-3.3	-0.32	183.0	-1.7	-0.18	ZZ
H3MKR4		190.5	6.7	0.66	202.0	17.3	1.83	ZZ
J49DFD		187.5	3.7	0.37	199.5	14.8	1.56	ZZ
J4G8L7		182.0	-1.7	-0.17	186.4	1.7	0.18	ZZ
JEXG9T		184.0	0.2	0.02	180.5	-4.2	-0.44	ZZ
JFVZF8		183.5	-0.3	-0.03	178.5	-6.2	-0.65	ZZ
JTRKBC		177.5	-6.3	-0.62	180.0	-4.7	-0.50	ZZ
LFL8CF		198.1	14.3	1.40	195.9	11.2	1.18	ZZ
LJ6L26		167.0	-16.8	-1.65	172.0	-12.7	-1.34	ZZ
ME99YY		190.0	6.2	0.61	181.3	-3.4	-0.36	ZZ
MGXLG		181.5	-2.3	-0.22	179.0	-5.7	-0.60	ZZ
MJQBDA		176.5	-7.3	-0.71	173.5	-11.2	-1.18	ZZ
MNUH32		195.5	11.8	1.15	185.9	1.2	0.12	ZZ
NVBA9Q		190.5	6.7	0.66	188.5	3.8	0.40	ZZ
P4JQCP		189.3	5.5	0.54	187.1	2.4	0.25	ZZ
P79ZK6		183.5	-0.3	-0.03	179.0	-5.7	-0.60	ZZ
PJ87U3		168.6	-15.2	-1.49	167.0	-17.7	-1.87	ZZ
PLJDLH	X	151.6	-32.2	-3.16	150.8	-33.9	-3.58	ZZ
QBUVFM	X	203.1	19.3	1.89	217.6	32.9	3.47	ZZ
QGW6M		190.5	6.7	0.66	195.5	10.8	1.14	ZZ
QKKMT7		203.0	19.2	1.88	199.1	14.4	1.52	ZZ
QL47D7		173.0	-10.8	-1.06	173.5	-11.2	-1.18	ZZ
QNQFDD	*	193.3	9.5	0.93	176.0	-8.7	-0.92	ZZ
RJZWY8		180.0	-3.8	-0.37	176.0	-8.7	-0.92	ZZ
RU4BD8	X	154.0	-29.8	-2.92	151.5	-33.2	-3.51	ZZ
TAUNF9		178.8	-5.0	-0.49	177.9	-6.8	-0.71	ZZ
TFR468		184.5	0.7	0.07	185.5	0.8	0.08	ZZ
U8NK6X		173.5	-10.2	-1.01	177.1	-7.6	-0.80	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
UDDKRB	X	215.0	31.2	3.07	223.5	38.8	4.10	ZZ
UHKN9P		186.6	2.8	0.28	189.2	4.5	0.48	ZZ
UM9YY9		192.5	8.7	0.86	191.5	6.8	0.72	ZZ
URB64K		184.0	0.2	0.02	176.4	-8.3	-0.88	ZZ
URD9LX		199.0	15.2	1.49	190.5	5.8	0.61	ZZ
UVHXD		185.6	1.8	0.18	194.7	10.0	1.05	ZZ
UW9Z6F		177.5	-6.3	-0.62	182.5	-2.2	-0.23	ZZ
UWQGD		176.9	-6.8	-0.67	188.6	3.9	0.41	ZZ
UZPEKA		202.5	18.7	1.84	203.0	18.3	1.93	ZZ
VAB2V3	X	185.3	1.5	0.15	162.0	-22.7	-2.40	ZZ
VJTZN6		176.9	-6.8	-0.67	182.0	-2.7	-0.28	ZZ
VZ986N		190.6	6.8	0.67	187.3	2.6	0.27	ZZ
WCH4M		169.7	-14.1	-1.38	169.7	-15.0	-1.58	ZZ
WQPFPW		184.0	0.2	0.02	181.5	-3.2	-0.34	ZZ
WRXXJG		186.0	2.2	0.22	180.0	-4.7	-0.50	ZZ
WV4F4W		181.0	-2.8	-0.27	182.5	-2.2	-0.23	ZZ
WXMY23		171.0	-12.8	-1.25	181.0	-3.7	-0.39	ZZ
XAPNJF		182.8	-1.0	-0.10	182.9	-1.8	-0.19	ZZ
XJLBA7		188.5	4.7	0.46	196.5	11.8	1.25	ZZ
XPYZ4Z		202.5	18.7	1.84	201.0	16.3	1.72	ZZ
Y9MZE4		179.0	-4.8	-0.47	187.5	2.8	0.30	ZZ
YDDNZ		179.5	-4.3	-0.42	185.5	0.8	0.08	ZZ
YYGWA		175.5	-8.3	-0.81	176.5	-8.2	-0.87	ZZ
Z4Z6QW		187.5	3.7	0.37	194.0	9.3	0.98	ZZ
ZA4QF7		183.5	-0.3	-0.03	181.7	-3.0	-0.32	ZZ
ZJ6KUJ		179.0	-4.8	-0.47	181.5	-3.2	-0.34	ZZ

Summary Statistics

	Sample B01-B02	Sample B03-B04
Grand Means	183.77 psi	184.70 psi
Stnd Dev Btwn Labs	10.19 psi	9.47 psi

Statistics based on 86 of 96 reporting participants

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Summary Statistics in SI Units

Grand Means	1.2670 MPa	1.27 MPa
Stnd Dev Btwn Labs	0.0702 MPa	0.07 MPa

Statistics based on 86 of 96 reporting participants

Samples B01-B02: Polyisoprene compound, batch #1 & B03-B04: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #608

2TNF6J (X) - Data for all Samples are high.

67UGW6 (X) - Inconsistency in testing between Sample sets. High for Sample set B01-B02 and Low for Sample set B03-B04.

CEEAMH (X) - Data for all Samples are high.

DF4VVY (X) - Data for all Samples are high.

FZQP2B (X) - Data for all Samples are high.

PLJDLH (X) - Data for all Samples are low. Possible Systematic Error.

QBUVFM (X) - Data for Sample set B03-B04 are high.

RU4BD8 (X) - Data for all Samples are low.

UDDKRB (X) - Data for all Samples are high.

VAB2V3 (X) - Inconsistency in testing between Sample sets.

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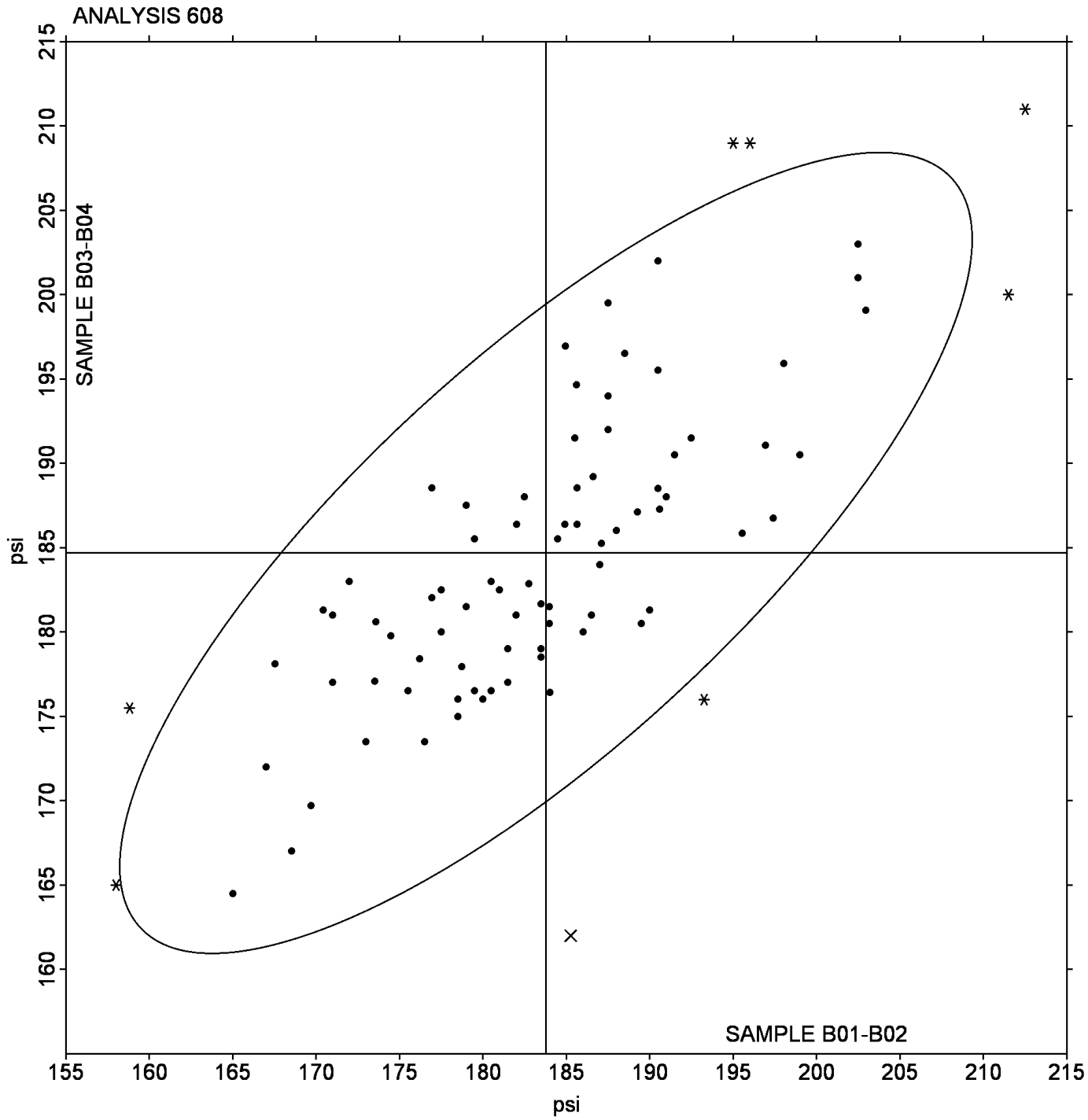
Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample **B01-B02** = 183.77 psi

Grand Mean Sample **B03-B04** = 184.70 psi



Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
228MBE		50.00	2.76	1.48	50.00	2.55	1.35	ZZ
2PXV49	*	46.00	-1.24	-0.66	44.50	-2.95	-1.57	ZZ
3C9B3C		44.00	-3.24	-1.74	44.00	-3.45	-1.83	ZZ
43GEG3		47.80	0.56	0.30	47.95	0.50	0.26	ZZ
4B4LQR		48.50	1.26	0.68	48.00	0.55	0.29	ZZ
4KGR8A		51.00	3.76	2.02	51.00	3.55	1.88	ZZ
4NWZW		45.50	-1.74	-0.93	46.20	-1.25	-0.66	ZZ
4P6LF3		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
4RZMUC	*	46.50	-0.74	-0.40	45.00	-2.45	-1.30	ZZ
4YJBQM		46.50	-0.74	-0.40	46.50	-0.95	-0.51	ZZ
4Z99U3		50.00	2.76	1.48	50.00	2.55	1.35	ZZ
66NF9Y		45.60	-1.64	-0.88	45.30	-2.15	-1.14	ZZ
69D2L2		47.50	0.26	0.14	48.00	0.55	0.29	ZZ
6A7D3G		48.00	0.76	0.41	48.50	1.05	0.56	ZZ
6FYDW4		49.00	1.76	0.95	50.50	3.05	1.62	ZZ
6JWDVT		48.40	1.16	0.62	48.30	0.85	0.45	ZZ
6YTMXQ		47.10	-0.14	-0.07	47.35	-0.10	-0.05	ZZ
6ZLB3K		44.50	-2.74	-1.47	45.00	-2.45	-1.30	ZZ
76G7JX		48.55	1.31	0.71	49.35	1.90	1.01	ZZ
7BHRZZ		44.50	-2.74	-1.47	45.00	-2.45	-1.30	ZZ
7KAUTW	X	53.50	6.26	3.36	53.50	6.05	3.21	ZZ
7MJWN9		46.90	-0.34	-0.18	47.90	0.45	0.24	ZZ
87JJ8R		47.90	0.66	0.36	48.35	0.90	0.48	ZZ
8JERKC		47.80	0.56	0.30	47.60	0.15	0.08	ZZ
8L7ZY3		46.10	-1.14	-0.61	47.55	0.10	0.05	ZZ
8MQUY3		46.00	-1.24	-0.66	46.50	-0.95	-0.51	ZZ
8YAL3R		45.70	-1.54	-0.83	46.95	-0.50	-0.27	ZZ
9JRLHY		48.50	1.26	0.68	48.25	0.80	0.42	ZZ
9U6GCY		45.05	-2.19	-1.17	45.00	-2.45	-1.30	ZZ
A3ZU7K		44.50	-2.74	-1.47	44.50	-2.95	-1.57	ZZ
BC8RNM	*	46.25	-0.99	-0.53	48.00	0.55	0.29	ZZ
BZDB27		48.00	0.76	0.41	48.50	1.05	0.56	ZZ
CHG33Z		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
CJL7FB		48.50	1.26	0.68	49.50	2.05	1.09	ZZ
CWCZPJ		46.10	-1.14	-0.61	46.10	-1.35	-0.72	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
CXAQBD		45.60	-1.64	-0.88	46.95	-0.50	-0.27	ZZ
CZCZH9		47.00	-0.24	-0.13	48.00	0.55	0.29	ZZ
DMDWL	*	45.50	-1.74	-0.93	47.50	0.05	0.02	ZZ
ECL4HM		50.00	2.76	1.48	50.25	2.80	1.48	ZZ
ELMKTE		49.00	1.76	0.95	49.00	1.55	0.82	ZZ
F2L3YB		48.00	0.76	0.41	49.50	2.05	1.09	ZZ
FKZRXU		48.00	0.76	0.41	48.00	0.55	0.29	ZZ
FLGQLD		51.50	4.26	2.29	51.50	4.05	2.15	ZZ
FTH3KV	X	39.00	-8.24	-4.42	39.50	-7.95	-4.22	ZZ
G672TQ	*	44.50	-2.74	-1.47	43.50	-3.95	-2.10	ZZ
G8HHLV		45.50	-1.74	-0.93	45.50	-1.95	-1.04	ZZ
GF3D4D		46.80	-0.44	-0.23	47.45	0.00	0.00	ZZ
GWFP4C		47.50	0.26	0.14	47.50	0.05	0.02	ZZ
HP8CDJ		46.00	-1.24	-0.66	47.00	-0.45	-0.24	ZZ
HYRNBP		46.95	-0.29	-0.15	46.70	-0.75	-0.40	ZZ
J3ZD4Z		44.50	-2.74	-1.47	44.50	-2.95	-1.57	ZZ
JEDHBT		43.50	-3.74	-2.01	43.75	-3.70	-1.96	ZZ
JFVHF4	X	53.95	6.71	3.61	54.10	6.65	3.52	ZZ
JPYRPG		49.30	2.06	1.11	49.25	1.80	0.95	ZZ
JUDVTJ		48.10	0.86	0.46	48.70	1.25	0.66	ZZ
JWCVJU		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
JWNU3J	X	49.50	2.26	1.22	51.50	4.05	2.15	ZZ
KNLHCA		46.10	-1.14	-0.61	46.70	-0.75	-0.40	ZZ
L2E6RU		49.85	2.61	1.40	49.90	2.45	1.30	ZZ
LJ9KD8		46.20	-1.04	-0.56	46.35	-1.10	-0.58	ZZ
LNF76B		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
LQ43W3		45.00	-2.24	-1.20	45.00	-2.45	-1.30	ZZ
LQUJ47		50.00	2.76	1.48	50.00	2.55	1.35	ZZ
LW3PXQ		48.00	0.76	0.41	48.50	1.05	0.56	ZZ
MCR897		51.00	3.76	2.02	51.00	3.55	1.88	ZZ
MH2HKY		47.00	-0.24	-0.13	46.50	-0.95	-0.51	ZZ
MKQRRF		47.25	0.01	0.01	47.75	0.30	0.16	ZZ
MRN9W7		46.05	-1.19	-0.64	46.35	-1.10	-0.58	ZZ
MZJJDF		45.50	-1.74	-0.93	46.00	-1.45	-0.77	ZZ
N6RTYV	X	62.00	14.76	7.93	60.00	12.55	6.65	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample B03-B04 Lab Mean	Sample B03-B04 Diff from Grand Mean	Sample B03-B04 CPV	Instr Code
N9BFVU	X	54.75	7.51	4.04	54.75	7.30	3.87	ZZ
NJXR9F		46.60	-0.64	-0.34	47.40	-0.05	-0.03	ZZ
NRR9BJ		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
P9GG3F	X	43.00	-4.24	-2.28	45.00	-2.45	-1.30	ZZ
PJA7EG		46.30	-0.94	-0.50	46.00	-1.45	-0.77	ZZ
PZ9V6D		49.50	2.26	1.22	50.00	2.55	1.35	ZZ
Q4LDJZ		45.00	-2.24	-1.20	46.30	-1.15	-0.61	ZZ
QMZCPD		47.50	0.26	0.14	47.00	-0.45	-0.24	ZZ
QN82W9		50.00	2.76	1.48	50.00	2.55	1.35	ZZ
RFZL48		45.00	-2.24	-1.20	45.00	-2.45	-1.30	ZZ
RPRG6V		48.00	0.76	0.41	48.00	0.55	0.29	ZZ
RX7KUN		48.00	0.76	0.41	48.30	0.85	0.45	ZZ
RXKN78	*	52.90	5.66	3.04	53.00	5.55	2.94	ZZ
T7NAGE		47.25	0.01	0.01	47.75	0.30	0.16	ZZ
T9J9Y8		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
TFGYHW		48.10	0.86	0.46	47.95	0.50	0.26	ZZ
TLPC99		46.50	-0.74	-0.40	47.00	-0.45	-0.24	ZZ
U8HH34		47.00	-0.24	-0.13	47.00	-0.45	-0.24	ZZ
U8M44Y		46.80	-0.44	-0.23	46.70	-0.75	-0.40	ZZ
UEKDDP		47.50	0.26	0.14	48.00	0.55	0.29	ZZ
UGBN4H		45.50	-1.74	-0.93	45.00	-2.45	-1.30	ZZ
UHK778		49.25	2.01	1.08	49.30	1.85	0.98	ZZ
URV9R9		49.50	2.26	1.22	50.00	2.55	1.35	ZZ
VPVCCP		49.00	1.76	0.95	49.00	1.55	0.82	ZZ
X3FFQY		45.25	-1.99	-1.07	45.75	-1.70	-0.90	ZZ
X8F4LL		46.00	-1.24	-0.66	46.00	-1.45	-0.77	ZZ
XAYCJZ		43.50	-3.74	-2.01	44.00	-3.45	-1.83	ZZ
XBZUEC		49.00	1.76	0.95	48.00	0.55	0.29	ZZ
XMAQW		45.00	-2.24	-1.20	45.50	-1.95	-1.04	ZZ
XVBFX4		46.95	-0.29	-0.15	47.35	-0.10	-0.05	ZZ
Y2ZHY2		48.00	0.76	0.41	48.00	0.55	0.29	ZZ
Y4Y2G2		50.00	2.76	1.48	50.00	2.55	1.35	ZZ
YU2YLW		45.65	-1.59	-0.85	44.90	-2.55	-1.35	ZZ
YU3V9D		50.00	2.76	1.48	49.00	1.55	0.82	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Summary Statistics

Grand Means	47.237 Type A	47.453 Type A
Stnd Dev Btwn Labs	1.862 Type A	1.886 Type A

Statistics based on 97 of 104 reporting participants

Samples B01-B02: Polyisoprene compound, batch #1 & B03-B04: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

7KAUTW (X) - Data for all Samples are high. Possible Systematic Error.

FTH3KV (X) - Data for all Samples are low. Possible Systematic Error.

JFVHF4 (X) - Data for all Samples are low. Possible Systematic Error.

JWNU3J (X) - Inconsistency in testing between Sample sets.

N6RTYV (X) - Data for all Samples are high.

N9BFVU (X) - Data for all Samples are high. Possible Systematic Error.

P9GG3F (X) - Inconsistency in testing between Sample sets.

Results by Reading Time (as reported by laboratory)

	Sample B01 *Polyisoprene compound, batch #1*			Sample B02 *Polyisoprene compound, batch #1*				
Reading Time	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Readings taken within 0 - 5 second	47.41	1.73	0.17	47.61	1.66	0.15	69	78
Readings taken at 5 seconds	47.30	2.34	0.06	47.30	2.42	-0.15	8	9
Readings taken after 5+ seconds	46.19	1.46	-1.04	46.66	1.62	-0.79	8	8
Maximum hardness indicator used	46.85	1.98	-0.39	47.47	2.30	0.01	6	9

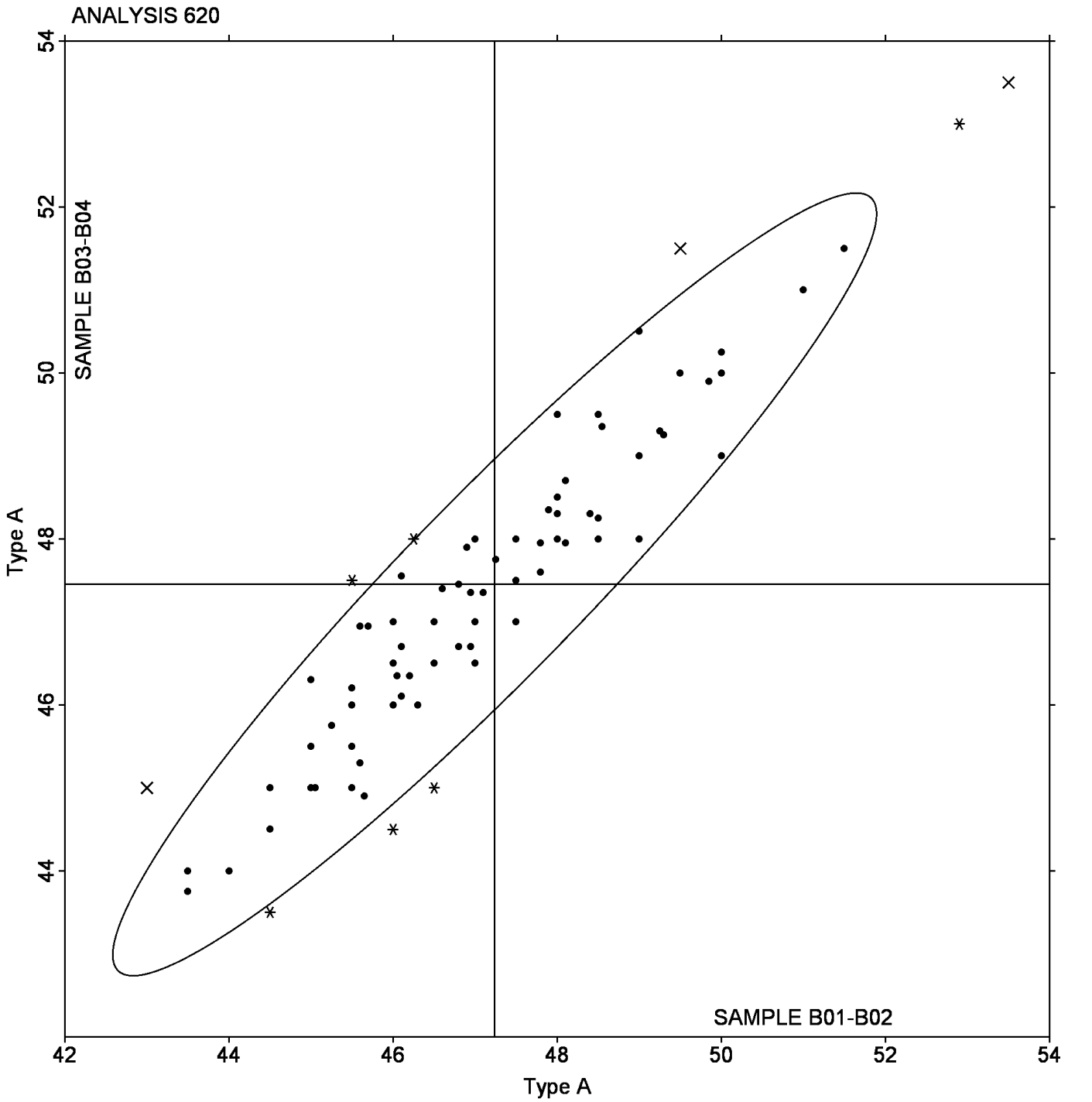
Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample **B01-B02** = 47.237 Type A

Grand Mean Sample **B03-B04** = 47.453 Type A



Rubber Interlaboratory Testing Program

Analysis 630

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

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample K01-K02 Lab Mean	Sample K01-K02 Diff from Grand Mean	Sample K01-K02 CPV	Instr Code
2BZXMX		3,529.2	290.0	1.84	3,367.6	191.4	1.11	ZZ
4L6BK3		3,284.5	45.2	0.29	3,147.5	-28.7	-0.17	ZZ
983L64	*	3,063.7	-175.6	-1.12	2,674.2	-502.0	-2.90	ZZ
9V32JE		3,420.6	181.3	1.15	3,404.0	227.8	1.32	ZZ
AGTF8T		3,086.9	-152.4	-0.97	3,265.2	89.0	0.52	ZZ
AW92Y4		3,089.0	-150.3	-0.96	3,187.5	11.3	0.07	ZZ
B2E4CL		3,529.9	290.7	1.85	3,400.3	224.2	1.30	ZZ
BWD6F9		3,203.5	-35.8	-0.23	3,225.5	49.3	0.29	ZZ
DUU2LF		3,252.0	12.7	0.08	3,091.0	-85.2	-0.49	ZZ
F3LLVR		3,217.4	-21.9	-0.14	3,044.2	-132.0	-0.76	ZZ
HDCN4W		3,424.0	184.7	1.18	2,956.0	-220.2	-1.27	ZZ
HP6MVH		3,372.3	133.1	0.85	3,294.8	118.7	0.69	ZZ
J74BER	*	2,808.5	-430.8	-2.74	2,992.0	-184.2	-1.07	ZZ
JBQL4A		3,292.4	53.1	0.34	3,365.6	189.5	1.10	ZZ
M7B3YP		3,324.3	85.0	0.54	3,295.3	119.1	0.69	ZZ
MTU8XL		3,205.0	-34.3	-0.22	3,161.5	-14.7	-0.08	ZZ
NAQGY		3,343.5	104.2	0.66	3,481.5	305.3	1.77	ZZ
NPJB94		3,403.0	163.7	1.04	3,069.5	-106.7	-0.62	ZZ
PHLRA6		3,097.5	-141.8	-0.90	3,026.0	-150.2	-0.87	ZZ
PNGHVA		3,172.0	-67.3	-0.43	2,952.0	-224.2	-1.30	ZZ
Q4CKAF		3,048.5	-190.8	-1.21	3,192.0	15.8	0.09	ZZ
R2QK2G		3,138.0	-101.3	-0.64	3,155.0	-21.2	-0.12	ZZ
RHTDCX		3,201.0	-38.2	-0.24	3,063.9	-112.2	-0.65	ZZ
RN2A6Q		3,222.1	-17.2	-0.11	3,149.4	-26.8	-0.15	ZZ
T7PT2Q		3,288.5	49.2	0.31	3,368.6	192.4	1.11	ZZ
WJBWM		3,217.5	-21.8	-0.14	3,158.2	-18.0	-0.10	ZZ
WMFZPY		3,339.0	99.7	0.63	3,217.0	40.8	0.24	ZZ
YYKWU		3,125.6	-113.7	-0.72	3,227.1	51.0	0.29	ZZ

Summary Statistics

	Sample B01-B02	Sample K01-K02
Grand Means	3,239.26 psi	3,176.16 psi
Stnd Dev Btwn Labs	157.19 psi	172.84 psi

Statistics based on 28 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 630

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

Summary Statistics in SI Units

Grand Means		
	22.334 MPa	21.90 MPa
Stnd Dev Btwn Labs		
	1.084 MPa	1.19 MPa

Statistics based on 28 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

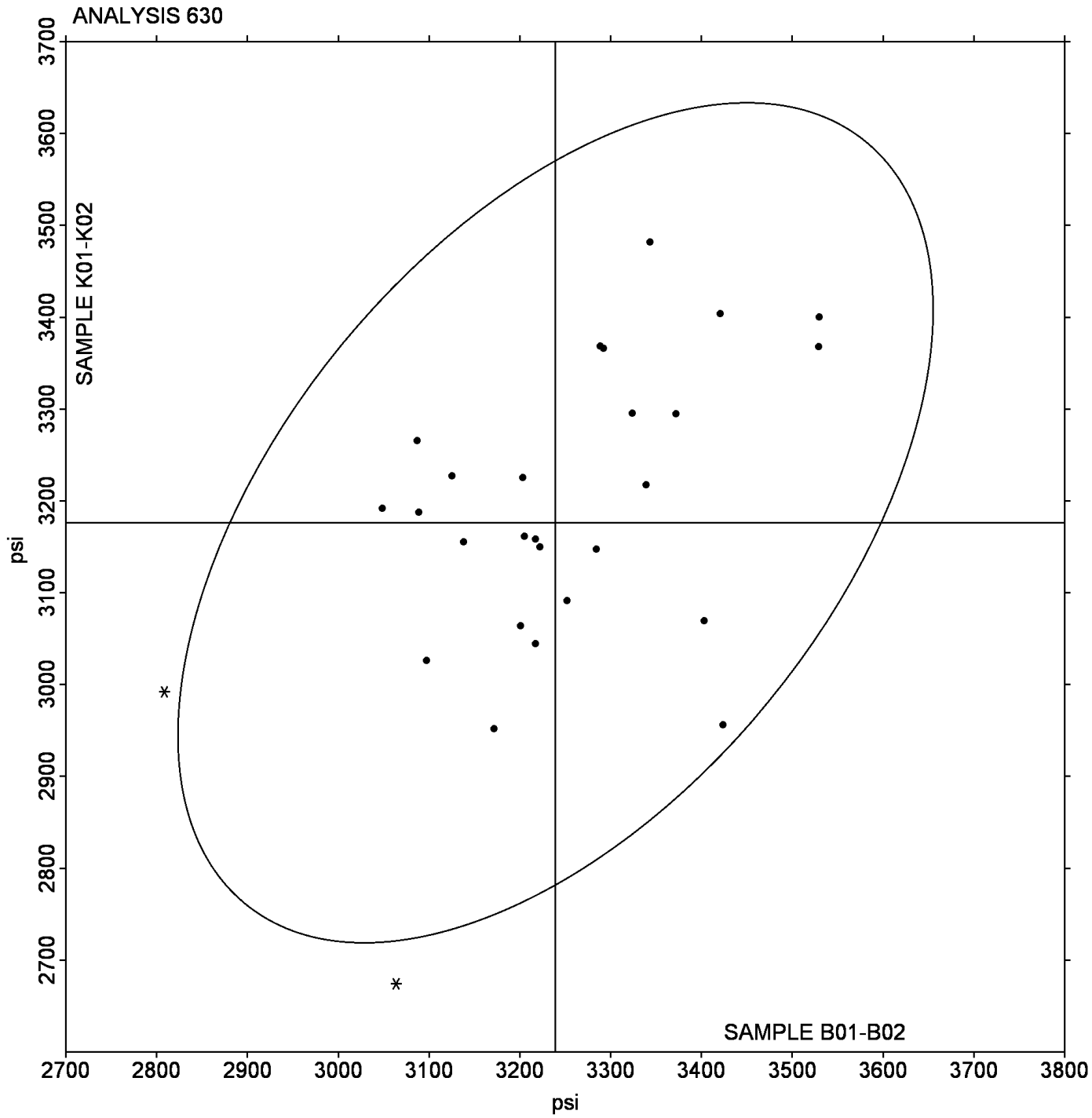
Rubber Interlaboratory Testing Program

Analysis 630

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

Grand Mean Sample **B01-B02** = 3,239.26 psi

Grand Mean Sample **K01-K02** = 3,176.16 psi



Rubber Interlaboratory Testing Program

Analysis 631

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

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample K01-K02 Lab Mean	Sample K01-K02 Diff from Grand Mean	Sample K01-K02 CPV	Instr Code
26PUQ4		643.0	14.0	0.65	579.5	0.7	0.04	ZZ
282MRX		680.9	51.9	2.42	592.2	13.3	0.77	ZZ
2UL8C6		626.5	-2.5	-0.12	551.0	-27.8	-1.61	ZZ
3B9GWT		624.5	-4.5	-0.21	573.5	-5.3	-0.31	ZZ
3KMLBP		626.5	-2.5	-0.12	578.5	-0.3	-0.02	ZZ
3WKHFD		644.0	15.0	0.70	568.5	-10.3	-0.60	ZZ
4B2BTG	*	640.0	10.9	0.51	627.6	48.7	2.83	ZZ
9UCTJA		641.7	12.6	0.59	588.9	10.0	0.58	ZZ
A8HELR		625.5	-3.5	-0.16	556.5	-22.3	-1.30	ZZ
ACZCFA		648.2	19.2	0.89	583.2	4.4	0.25	ZZ
CFE7L4		628.4	-0.7	-0.03	572.4	-6.4	-0.37	ZZ
CFXYD2		623.5	-5.5	-0.26	574.0	-4.8	-0.28	ZZ
DN7GHZ		613.5	-15.5	-0.72	582.5	3.7	0.21	ZZ
F9XDVH		613.5	-15.5	-0.72	598.5	19.7	1.14	ZZ
GZUGPK		621.5	-7.5	-0.35	556.5	-22.3	-1.30	ZZ
JGMPFA		643.0	14.0	0.65	591.5	12.7	0.74	ZZ
LCR347		613.5	-15.5	-0.72	559.0	-19.8	-1.15	ZZ
MCWMZ		663.5	34.5	1.61	601.5	22.7	1.32	ZZ
PWK2TZ		619.6	-9.4	-0.44	567.6	-11.3	-0.65	ZZ
RWY2QR		610.5	-18.5	-0.86	571.5	-7.3	-0.43	ZZ
U7AXMH		621.3	-7.8	-0.36	581.0	2.1	0.12	ZZ
UF3VH4		622.0	-7.0	-0.33	570.0	-8.8	-0.51	ZZ
VGGFBD		616.5	-12.5	-0.58	552.5	-26.3	-1.53	ZZ
W9W9W		619.5	-9.5	-0.44	596.5	17.7	1.03	ZZ
XPPLJE	*	572.5	-56.5	-2.63	567.0	-11.8	-0.69	ZZ
XRNMY		656.0	27.0	1.26	600.5	21.7	1.26	ZZ
YFGJJY		656.1	27.1	1.26	582.3	3.5	0.20	ZZ
ZGXZPC		597.7	-31.3	-1.46	583.2	4.3	0.25	ZZ

Summary Statistics

	Sample B01-B02	Sample K01-K02
Grand Means	629.03 percent	578.83 percent
Stnd Dev Btwn Labs	21.45 percent	17.24 percent

Statistics based on 28 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

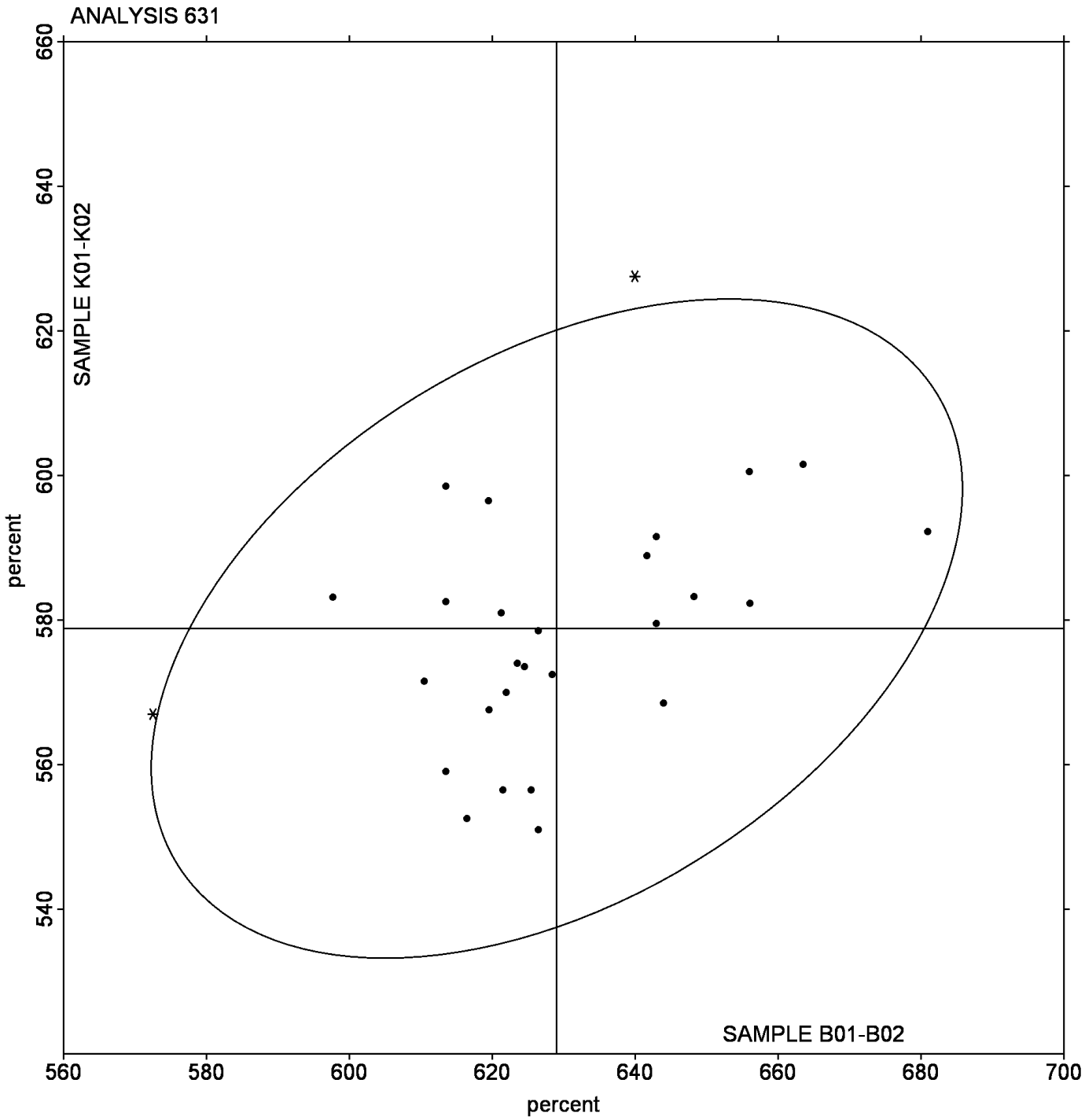
Rubber Interlaboratory Testing Program

Analysis 631

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

Grand Mean Sample **B01-B02** = 629.03 percent

Grand Mean Sample **K01-K02** = 578.83 percent



Rubber Interlaboratory Testing Program

Analysis 632

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

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample K01-K02 Lab Mean	Sample K01-K02 Diff from Grand Mean	Sample K01-K02 CPV	Instr Code
488CXK		873.9	25.4	0.59	1,079.1	6.1	0.06	ZZ
4GXE6E		840.5	-8.0	-0.19	1,055.1	-17.9	-0.17	ZZ
67UFW8		912.2	63.7	1.48	1,140.4	67.4	0.66	ZZ
6H42FZ		777.5	-71.0	-1.65	1,057.0	-16.0	-0.16	ZZ
7CNEVM		779.6	-68.9	-1.60	1,058.8	-14.2	-0.14	ZZ
7DW3KC		876.0	27.5	0.64	1,094.3	21.4	0.21	ZZ
ANDYW		840.0	-8.5	-0.20	1,232.0	159.0	1.55	ZZ
BB78VM		824.3	-24.2	-0.56	1,202.0	129.0	1.26	ZZ
BMRYP		871.5	23.0	0.53	1,092.5	19.5	0.19	ZZ
BYBMH		856.0	7.5	0.17	1,037.5	-35.5	-0.35	ZZ
DR2QB9		792.5	-56.0	-1.30	1,090.0	17.0	0.17	ZZ
FLR3XH		771.8	-76.7	-1.78	1,109.4	36.5	0.36	ZZ
GDHJAX		872.5	24.0	0.56	1,006.0	-67.0	-0.65	ZZ
GZWQQ		881.0	32.5	0.75	1,195.5	122.5	1.19	ZZ
HPTYY9		779.9	-68.5	-1.59	1,232.2	159.2	1.55	ZZ
JZXEVR		883.0	34.5	0.80	1,086.0	13.0	0.13	ZZ
KBE43G		888.1	39.6	0.92	1,162.7	89.7	0.87	ZZ
KCTNUR		892.7	44.2	1.03	1,038.5	-34.5	-0.34	ZZ
KGCU8Z		858.0	9.5	0.22	1,004.0	-69.0	-0.67	ZZ
NHRLF7		768.5	-80.0	-1.86	988.5	-84.5	-0.82	ZZ
NVGZH3		904.5	56.0	1.30	1,165.0	92.0	0.90	ZZ
P6C8FQ		818.6	-29.9	-0.69	873.0	-200.0	-1.95	ZZ
TJ92K4		857.0	8.5	0.20	1,120.0	47.0	0.46	ZZ
V9ZEVG		864.9	16.5	0.38	818.3	-254.7	-2.48	ZZ
VL97RM		847.6	-0.9	-0.02	1,080.2	7.3	0.07	ZZ
YR9ZKT		856.5	8.0	0.19	1,034.5	-38.5	-0.37	ZZ
YXGXW		885.5	37.0	0.86	857.5	-215.5	-2.10	ZZ
ZP24EV		883.5	35.0	0.81	1,133.0	60.0	0.59	ZZ

Summary Statistics

	Sample B01-B02	Sample K01-K02
Grand Means	848.49 psi	1,072.96 psi
Stnd Dev Btwn Labs	43.09 psi	102.61 psi

Statistics based on 28 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 632

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

Summary Statistics in SI Units

Grand Means	5.8501 MPa	7.40 MPa
Stnd Dev Btwn Labs	0.2971 MPa	0.71 MPa

Statistics based on 28 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

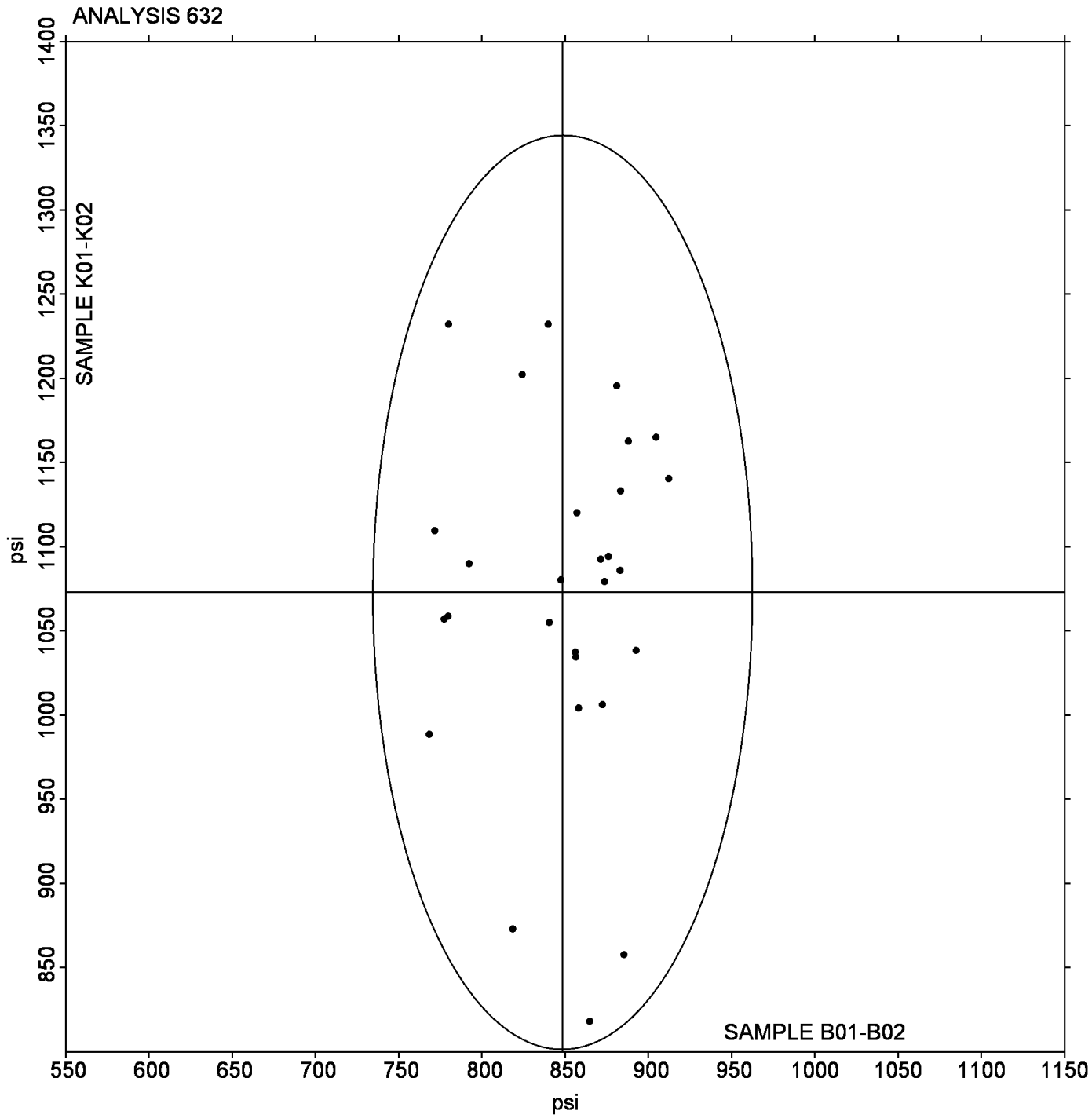
Rubber Interlaboratory Testing Program

Analysis 632

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

Grand Mean Sample **B01-B02** = 848.49 psi

Grand Mean Sample **K01-K02** = 1,072.96 psi



Rubber Interlaboratory Testing Program

Analysis 633

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

WebCode	Data Flag	Sample B01-B02 Lab Mean	Sample B01-B02 Diff from Grand Mean	Sample B01-B02 CPV	Sample K01-K02 Lab Mean	Sample K01-K02 Diff from Grand Mean	Sample K01-K02 CPV	Instr Code
2H49AB		189.3	7.2	0.85	236.4	-1.1	-0.04	ZZ
46WEAG		176.5	-5.5	-0.65	233.5	-4.0	-0.16	ZZ
73BLTD		186.6	4.6	0.54	238.7	1.2	0.05	ZZ
8PFV8E		172.0	-10.0	-1.18	233.5	-4.0	-0.16	ZZ
8VDCAJ		169.7	-12.3	-1.45	233.5	-4.0	-0.16	ZZ
99GXCA		190.6	8.6	1.01	245.2	7.7	0.32	ZZ
A3MMD		187.5	5.5	0.64	255.0	17.5	0.72	ZZ
A6X3AG		174.5	-7.6	-0.89	255.8	18.3	0.75	ZZ
ALVRG7		185.6	3.6	0.42	228.8	-8.7	-0.36	ZZ
BEQARU	*	158.0	-24.0	-2.83	221.5	-16.0	-0.66	ZZ
CJQPGL		180.0	-2.0	-0.24	186.0	-51.5	-2.12	ZZ
CWKEJK		173.5	-8.5	-1.00	241.8	4.3	0.18	ZZ
DDPT8D		183.5	1.5	0.17	221.5	-16.0	-0.66	ZZ
DEY68H		187.5	5.5	0.64	242.5	5.0	0.21	ZZ
EHU7TX		195.5	13.5	1.59	248.4	10.9	0.45	ZZ
GKLYZC		185.6	3.6	0.42	236.4	-1.1	-0.04	ZZ
GRV2TK		198.1	16.0	1.88	254.5	17.0	0.70	ZZ
HCPWJF		177.5	-4.5	-0.53	249.5	12.0	0.50	ZZ
J9RKM9	*	182.5	0.5	0.05	308.0	70.5	2.91	ZZ
JYTYKR		182.8	0.7	0.08	181.3	-56.2	-2.32	ZZ
KWJAX9		173.0	-9.0	-1.06	220.5	-17.0	-0.70	ZZ
L4XWA6	X	234.0	52.0	6.11	302.0	64.5	2.66	ZZ
L9K7GB		178.8	-3.3	-0.39	256.4	19.0	0.78	ZZ
PNQWZY		182.0	0.0	0.00	233.5	-4.0	-0.16	ZZ
UBBJQD		186.5	4.5	0.52	240.0	2.5	0.10	ZZ
WM78FE		184.0	2.0	0.23	237.0	-0.5	-0.02	ZZ
XM7KL6		190.5	8.5	1.00	267.5	30.0	1.24	ZZ
ZYCU2D		183.5	1.5	0.17	205.5	-32.0	-1.32	ZZ

Summary Statistics

	Sample B01-B02	Sample K01-K02
Grand Means	182.04 psi	237.49 psi
Stnd Dev Btwn Labs	8.50 psi	24.26 psi

Statistics based on 27 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 633

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

Summary Statistics in SI Units

Grand Means	1.2551 MPa	1.64 MPa
Stnd Dev Btwn Labs	0.0586 MPa	0.17 MPa

Statistics based on 27 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #633

L4XWA6 (X) - Data for all Samples are high.

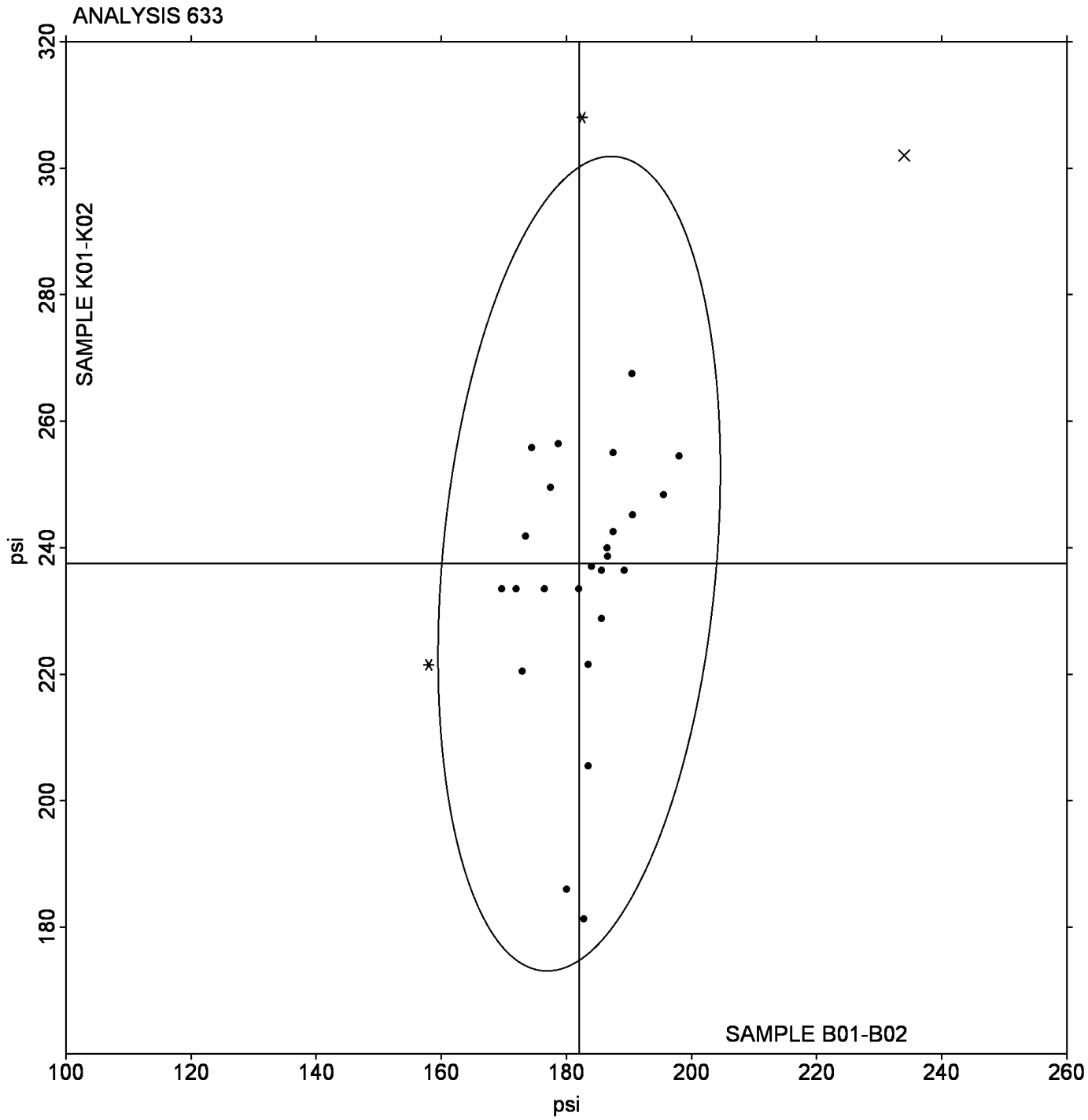
Rubber Interlaboratory Testing Program

Analysis 633

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

Grand Mean Sample **B01-B02** = 182.04 psi

Grand Mean Sample **K01-K02** = 237.49 psi



Rubber Interlaboratory Testing Program

Analysis 660

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

WebCode	Data Flag	Sample T01-T02 Lab Mean	Sample T01-T02 Diff from Grand Mean	Sample T01-T02 CPV	Sample T03-T04 Lab Mean	Sample T03-T04 Diff from Grand Mean	Sample T03-T04 CPV	Instr Code
47ZB37		77.83	0.88	0.85	46.50	1.44	1.63	MR
4DHN28		76.28	-0.67	-0.64	44.78	-0.27	-0.31	MR
4KUZUX		75.87	-1.08	-1.04	44.17	-0.89	-1.01	MR
4MZGXV		75.53	-1.42	-1.36	43.97	-1.09	-1.24	MR
66TBTB		75.25	-1.70	-1.64	44.10	-0.96	-1.09	TV
7RPKD6		77.33	0.38	0.37	45.87	0.81	0.92	MR
88B7VU		75.30	-1.65	-1.59	42.97	-2.09	-2.37	MR
8LQ9BX		77.03	0.08	0.08	45.02	-0.04	-0.05	MR
9VQRYZ		77.03	0.08	0.08	45.00	-0.06	-0.07	MR
9X7YU8	X	73.93	-3.02	-2.91	46.13	1.08	1.22	MR
BNERAE		77.55	0.60	0.58	45.63	0.57	0.65	TV
DLF7EZ		78.33	1.38	1.33	45.03	-0.02	-0.03	MR
DVTBQJ		76.83	-0.12	-0.11	44.85	-0.21	-0.24	MR
E8A63M		77.65	0.70	0.68	45.05	-0.01	-0.01	MR
EEBCQ4		78.12	1.17	1.13	45.00	-0.06	-0.07	TV
FGE43V		76.78	-0.17	-0.16	45.88	0.83	0.94	MR
FT9WVX		76.98	0.03	0.03	44.87	-0.19	-0.22	MR
FYTEY3		76.75	-0.20	-0.19	44.85	-0.21	-0.24	MR
GR67U3		78.71	1.76	1.69	45.65	0.59	0.67	MM
HZ39WR		76.15	-0.80	-0.77	44.55	-0.51	-0.58	MR
J3BXFA		78.72	1.77	1.70	46.27	1.21	1.37	MR
K7MTBR		75.77	-1.18	-1.14	44.52	-0.54	-0.61	MR
LD3VTE		76.47	-0.48	-0.46	44.90	-0.16	-0.18	MR
LWQFDB		75.98	-0.97	-0.93	44.33	-0.72	-0.82	MP
NVM9RG		77.60	0.65	0.63	44.90	-0.16	-0.18	MR
PEFUEX		75.82	-1.13	-1.09	44.32	-0.74	-0.84	MR
QCZL7Q		78.92	1.97	1.90	47.13	2.08	2.35	MR
VAV6VU		76.35	-0.60	-0.58	45.17	0.11	0.12	MR
XHMUU		77.56	0.61	0.59	46.69	1.64	1.85	MR
XUHPAX		77.02	0.07	0.07	44.73	-0.33	-0.38	MR

Rubber Interlaboratory Testing Program

Analysis 660

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

Summary Statistics

Grand Means	76.949 ML 1 + 4	45.058 ML 1 + 4
Stnd Dev Btwn Labs	1.038 ML 1 + 4	0.883 ML 1 + 4

Statistics based on 29 of 30 reporting participants

Samples T01-T02: NBR & T03-T04: Butyl

Comments on assigned Data Flags for Test #660

9X7YU8 (X) - Data for Sample set T02-T02 are low. Also inconsistent in testing within both Sample sets.

Instrument Code Listing

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

Instruments:

(ML) Alpha Technologies/Monsanto model not specified
(MP) Monsanto Compact Mooney Viscometer
(MZ) Rebuilt Monsanto Mooney Viscometer
(TV) Tech Pro Visc Tech (any model)
(XX) Instrument make/model not specified by lab
(MM) Alpha Technologies Model 1xxx or OSM
(MR) Alpha Technologies Model MV2000/MV2000E
(SF) Scott STI (any model)
(XA) Special In-House Instrument

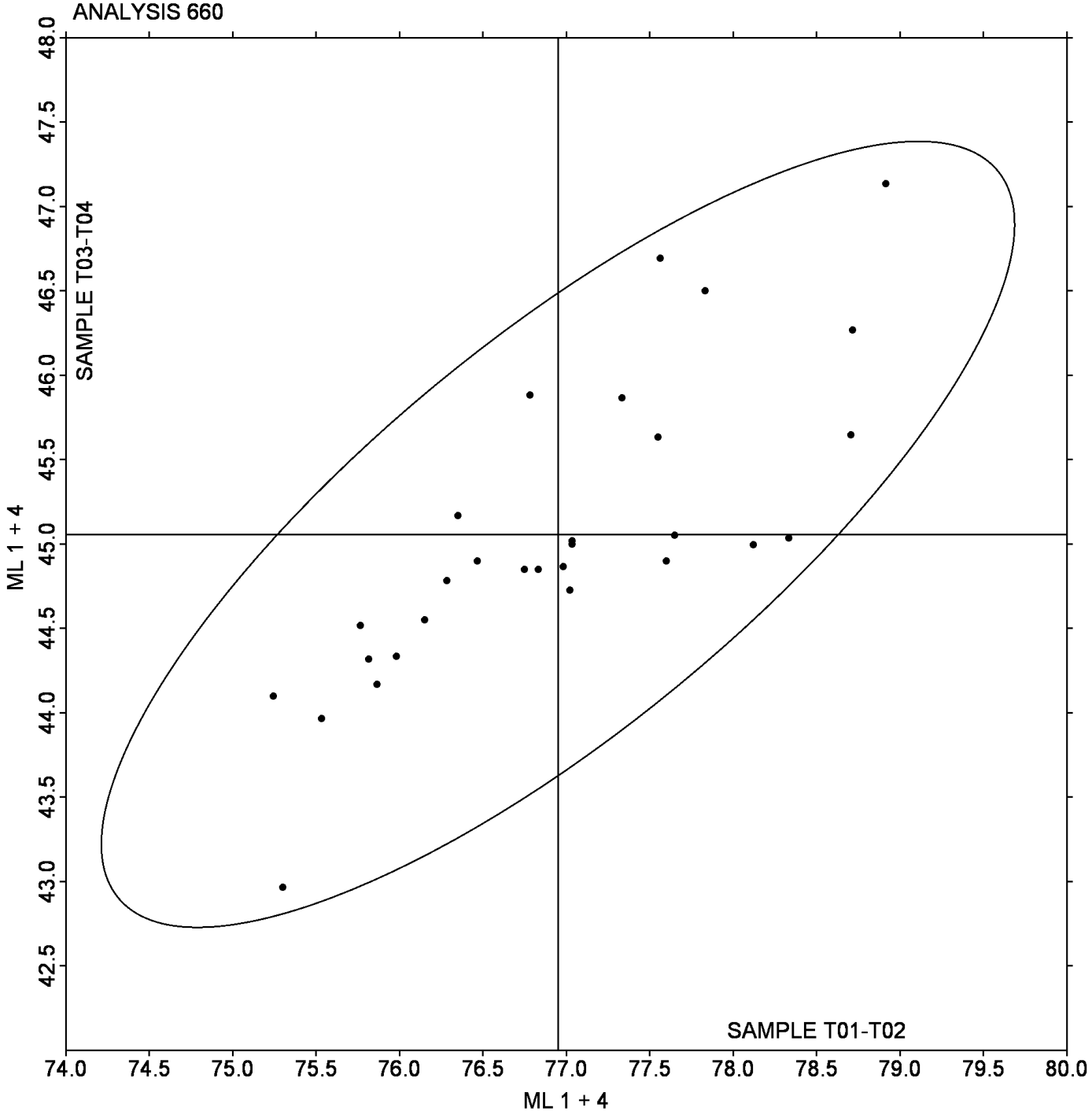
Rubber Interlaboratory Testing Program

Analysis 660

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

Grand Mean Sample **T01-T02** = 76.949 ML 1 + 4

Grand Mean Sample **T03-T04** = 45.058 ML 1 + 4



Rubber Interlaboratory Testing Program

Analysis 661

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

WebCode	Data Flag	Sample T01-T02 Lab Mean	Diff from Grand Mean	CPV	Sample T03-T04 Lab Mean	Diff from Grand Mean	CPV	Instr Code
37G8V8		77.33	0.36	0.36	44.55	1.00	1.27	MR
3LXJN8		76.15	-0.82	-0.80	43.20	-0.35	-0.45	MR
7AMLPV		75.30	-1.67	-1.63	41.72	-1.83	-2.34	MR
7N7PAB		78.12	1.15	1.12	43.59	0.04	0.05	TV
864XFH		76.35	-0.62	-0.60	43.57	0.02	0.02	MR
89MRHA		76.75	-0.22	-0.21	43.55	0.00	0.00	MR
96UWX9		78.92	1.95	1.90	44.73	1.18	1.51	MR
BJVKML		75.98	-0.99	-0.96	42.95	-0.60	-0.77	MP
DHDGM		77.03	0.06	0.06	43.50	-0.05	-0.07	MR
EP3KWD		78.72	1.75	1.70	44.00	0.45	0.57	MR
FP9LYX		76.98	0.01	0.01	43.37	-0.18	-0.24	MR
GQY3HK		77.65	0.68	0.66	43.43	-0.12	-0.15	MR
H87EVX	X	73.93	-3.04	-2.96	44.73	1.18	1.51	MR
H8QHVQ		77.03	0.06	0.06	43.47	-0.08	-0.11	MR
HY42GT		76.78	-0.19	-0.18	43.98	0.43	0.55	MR
JG3EQU		78.33	1.36	1.33	43.10	-0.45	-0.58	MR
KAEWAJ		77.60	0.63	0.62	43.60	0.05	0.06	XX
LE9VUT	*	77.56	0.59	0.58	45.63	2.07	2.64	MR
NHLZGY		75.82	-1.15	-1.12	42.85	-0.70	-0.89	MR
PV3T7C		75.87	-1.10	-1.07	42.78	-0.77	-0.98	MR
Q66XQT		78.71	1.74	1.69	43.86	0.31	0.40	MM
RCPBK4		76.83	-0.14	-0.13	43.62	0.07	0.08	MR
T3LWHM		75.25	-1.72	-1.68	42.11	-1.44	-1.84	TV
TZP477		76.47	-0.50	-0.49	43.58	0.03	0.04	MR
UCXCBV		77.55	0.58	0.57	44.75	1.20	1.53	TV
VMC2LE		76.28	-0.69	-0.67	43.57	0.02	0.02	MR
XTVMM		75.77	-1.20	-1.17	43.62	0.07	0.08	MR
Z9WWY		77.02	0.05	0.05	43.22	-0.33	-0.42	MR

Summary Statistics

	Sample T01-T02	Sample T03-T04
Grand Means	76.969 ML 1 + 8	43.551 ML 1 + 8
Stnd Dev Btwn Labs	1.026 ML 1 + 8	0.785 ML 1 + 8

Statistics based on 27 of 28 reporting participants

Please refer to the sample information provided for Analysis 660.

Rubber Interlaboratory Testing Program

Analysis 661

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

Comments on assigned Data Flags for Test #661

H87EVX (X) - Data for Sample set T01-T02 are low. Also inconsistent in testing within T01-T02.

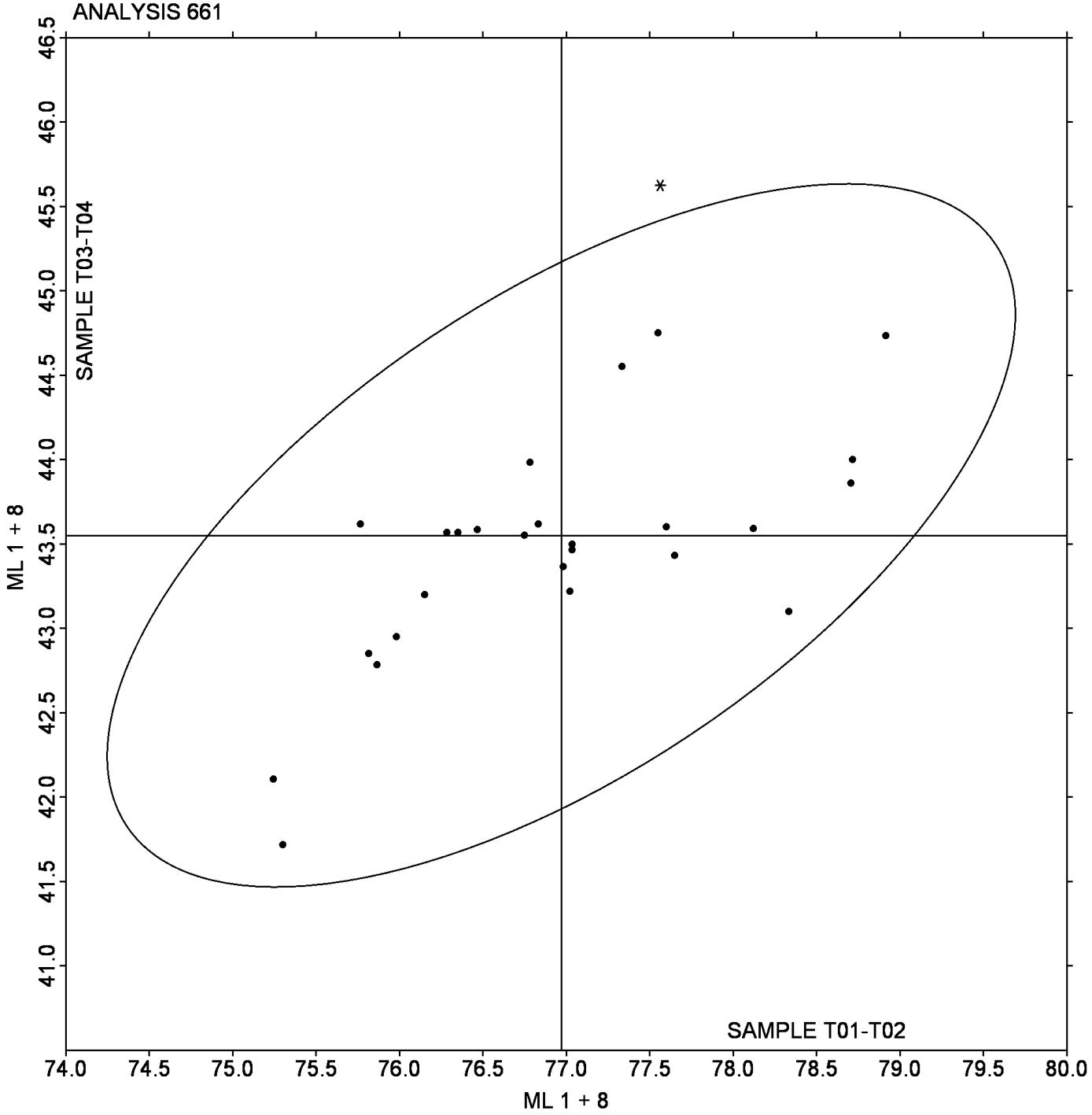
Rubber Interlaboratory Testing Program

Analysis 661

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

Grand Mean Sample **T01-T02** = 76.969 ML 1 + 8

Grand Mean Sample **T03-T04** = 43.551 ML 1 + 8



Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample T01-T02 Lab Mean	Sample T01-T02 Diff from Grand Mean	Sample T01-T02 CPV	Sample T03-T04 Lab Mean	Sample T03-T04 Diff from Grand Mean	Sample T03-T04 CPV	Instr Code
2F94GF	X	2,421.30	2,405.34	2,786.28	312.800	308.220	1,375.71	TV
4MDHR3		15.63	-0.33	-0.39	4.880	0.300	1.34	MR
74H6BM		16.62	0.65	0.76	4.520	-0.060	-0.27	MR
AGLVFX		15.97	0.01	0.01	4.383	-0.196	-0.88	MR
AW9HZ3		15.97	0.00	0.00	4.400	-0.180	-0.80	MR
AY8HYT		14.23	-1.74	-2.01	4.278	-0.301	-1.34	MR
EXQ4Q8		15.67	-0.30	-0.35	4.767	0.187	0.84	MR
FVE9NU		17.05	1.09	1.26	4.827	0.247	1.10	XX
VVD4BW		16.58	0.62	0.72	4.582	0.002	0.01	MR

Summary Statistics

	Sample T01-T02	Sample T03-T04
Grand Means	15.965 seconds	4.5796 seconds
Stnd Dev Btwn Labs	0.863 seconds	0.2240 seconds

Statistics based on 8 of 9 reporting participants

Samples T01-T02: NBR & T03-T04: Butyl

Comments on assigned Data Flags for Test #662

2F94GF (X) - Extreme data for both Sample sets.

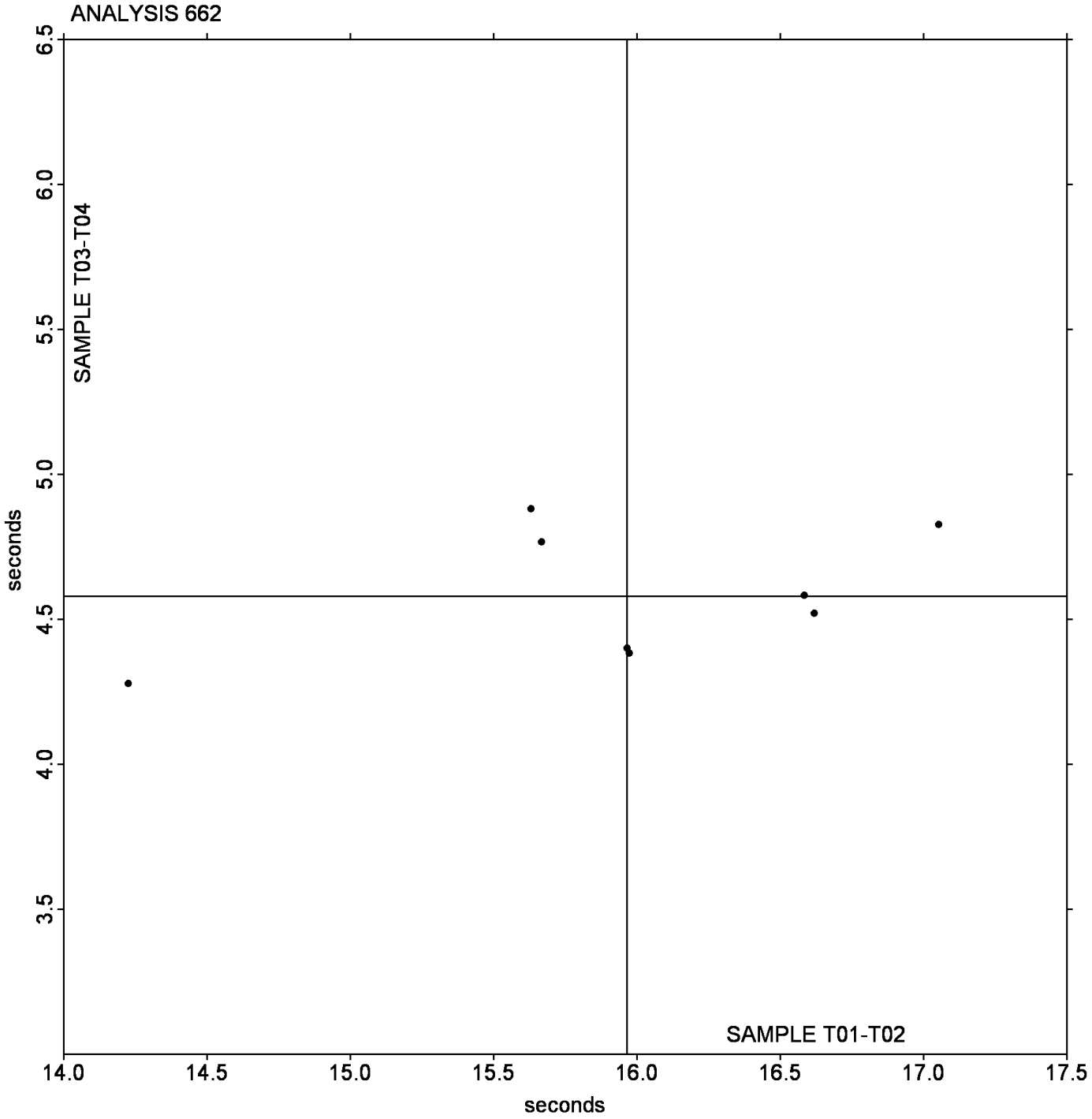
Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

Grand Mean Sample **T01-T02** = 15.965 seconds

Grand Mean Sample **T03-T04** = 4.5796 seconds



Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample T01-T02 Lab Mean	Sample T01-T02 Diff from Grand Mean	Sample T01-T02 CPV	Sample T03-T04 Lab Mean	Sample T03-T04 Diff from Grand Mean	Sample T03-T04 CPV	Instr Code
4ANAM4		84.04	-0.07	-0.02	96.55	-0.25	-0.23	MR
9V7AMD		84.40	0.28	0.08	97.23	0.44	0.40	MR
FRVELZ		77.33	-6.78	-2.02	96.37	-0.43	-0.40	TV
HEVH6K		85.10	0.98	0.29	98.09	1.29	1.20	MR
JYZTWL		90.68	6.56	1.95	98.70	1.91	1.77	MR
PKRA92		83.87	-0.25	-0.08	96.09	-0.71	-0.66	MR
UEGCCH		84.22	0.10	0.03	96.88	0.09	0.08	MR
WJN9KW		83.80	-0.32	-0.09	96.04	-0.76	-0.70	MR
ZCXTQA		83.63	-0.49	-0.15	95.21	-1.58	-1.47	XX

Summary Statistics

Grand Means

Sample T01-T02	Sample T03-T04
84.118 percent	96.797 percent

Stnd Dev Btwn Labs

Sample T01-T02	Sample T03-T04
3.364 percent	1.080 percent

Statistics based on 9 of 9 reporting participants

Samples T01-T02: NBR & T03-T04: Butyl

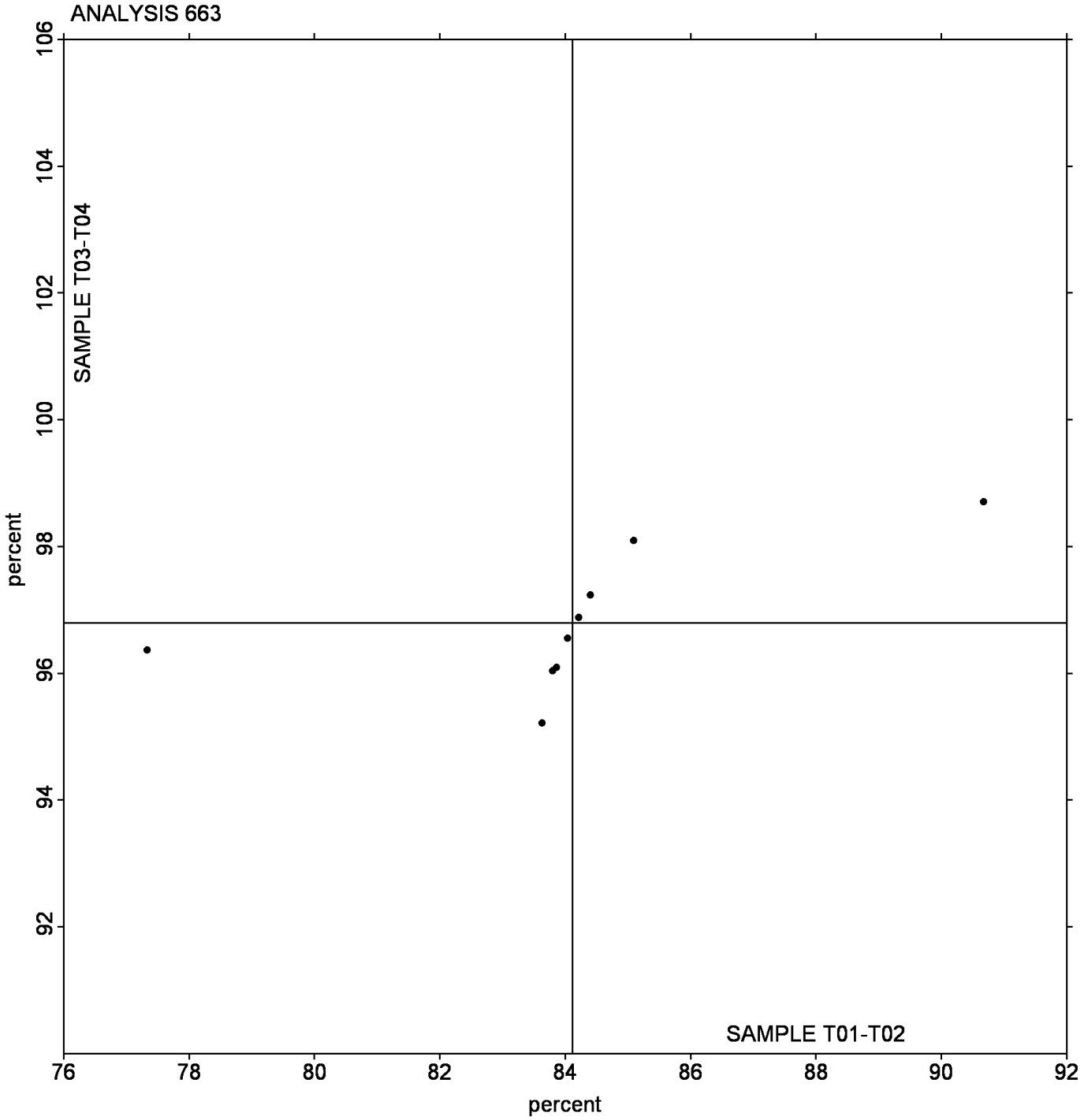
Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

Grand Mean Sample **T01-T02** = 84.118 percent

Grand Mean Sample **T03-T04** = 96.797 percent



Rubber Interlaboratory Testing Program

Analysis 664

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

WebCode	Data Flag	Sample T01-T02 Lab Mean	Sample T01-T02 Diff from Grand Mean	Sample T01-T02 CPV	Sample T03-T04 Lab Mean	Sample T03-T04 Diff from Grand Mean	Sample T03-T04 CPV	Instr Code
29EYME		1,389.0	57.0	1.14	167.8	-28.5	-0.77	TV
4PCZF7		1,369.8	37.7	0.76	266.0	69.7	1.88	XX
9WED74		1,330.2	-1.9	-0.04	173.5	-22.8	-0.61	MR
JKBJRM		1,327.3	-4.8	-0.10	194.0	-2.4	-0.06	MR
JNKEYY		1,347.7	15.6	0.31	216.7	20.4	0.55	MR
LRAPUG		1,244.1	-88.0	-1.76	147.9	-48.4	-1.30	MR
MC3D9N		1,275.8	-56.2	-1.12	184.5	-11.8	-0.32	XX
R77GWY		1,372.5	40.4	0.81	220.1	23.8	0.64	MR

Summary Statistics

	Sample T01-T02	Sample T03-T04
Grand Means	1,332.03 M-s	196.31 M-s
Stnd Dev Btwn Labs	49.96 M-s	37.17 M-s

Statistics based on 8 of 8 reporting participants

Samples T01-T02: NBR & T03-T04: Butyl

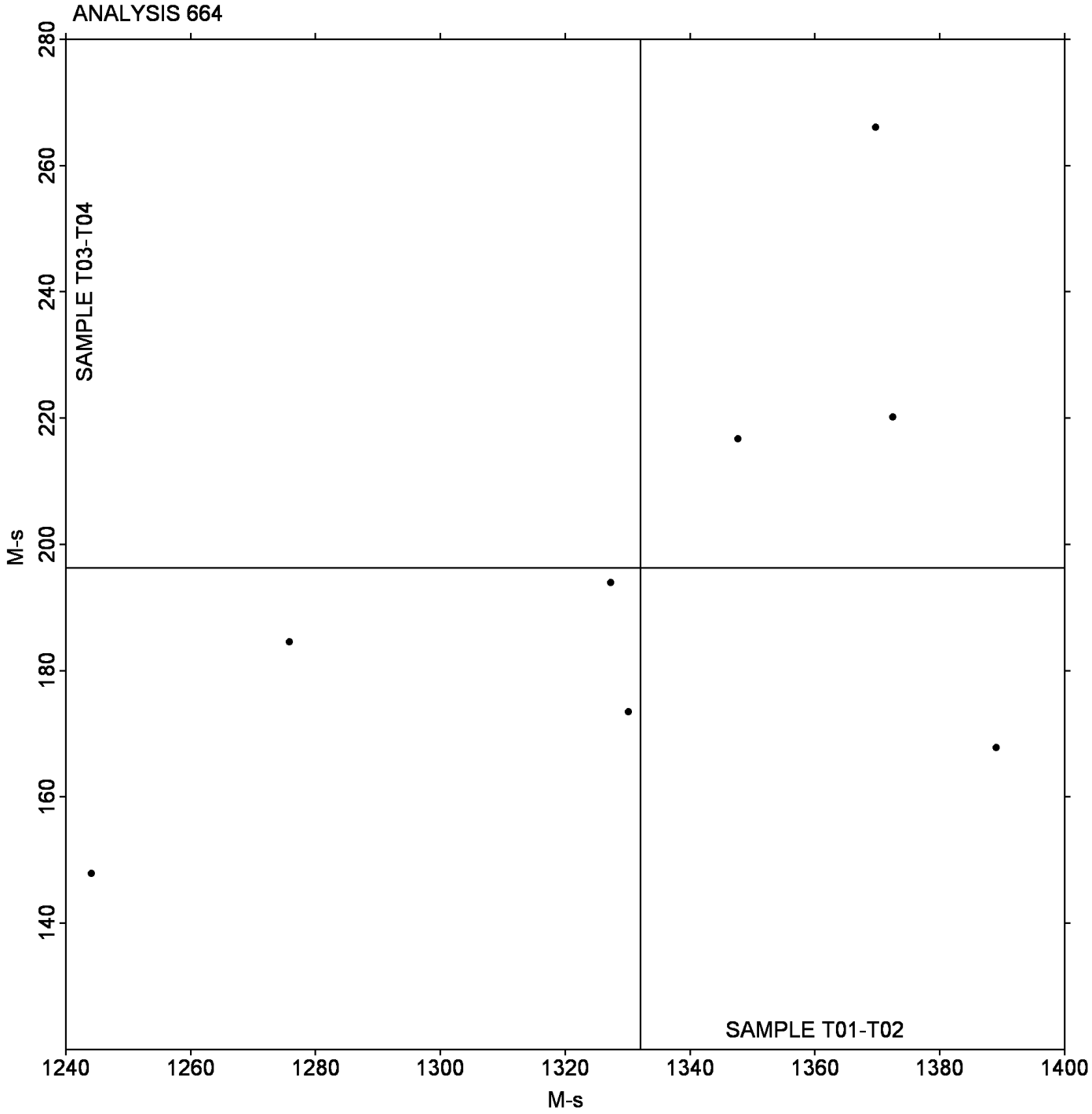
Rubber Interlaboratory Testing Program

Analysis 664

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

Grand Mean Sample **T01-T02** = 1,332.03 M-s

Grand Mean Sample **T03-T04** = 196.31 M-s



Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Sample X01-X02 Diff from Grand Mean	Sample X01-X02 CPV	Sample X03-X04 Lab Mean	Sample X03-X04 Diff from Grand Mean	Sample X03-X04 CPV	Instr Code
47BYZ7		1.960	0.109	0.74	1.950	0.118	0.34	ZZ
4LT7CB		1.857	0.005	0.04	2.357	0.525	1.51	ZZ
62QDHH		1.880	0.029	0.19	1.915	0.083	0.24	ZZ
9GJZPM		2.087	0.235	1.59	2.270	0.438	1.26	ZZ
9HEFEQ		1.928	0.077	0.52	1.990	0.158	0.45	ZZ
C84GTK		1.778	-0.073	-0.50	1.842	0.010	0.03	ZZ
D4DFAP		1.747	-0.105	-0.71	1.760	-0.072	-0.21	ZZ
F6FFZ2		1.813	-0.038	-0.26	1.858	0.026	0.08	ZZ
FV7F3E		1.698	-0.153	-1.04	1.745	-0.087	-0.25	ZZ
G9HURK		1.577	-0.275	-1.86	1.705	-0.127	-0.37	ZZ
NT46GN		1.847	-0.005	-0.03	1.912	0.080	0.23	ZZ
PUCQHB	*	2.147	0.295	2.00	0.833	-0.999	-2.87	ZZ
UAK7G9		1.802	-0.050	-0.34	1.840	0.008	0.02	ZZ
VZ793F		1.800	-0.051	-0.35	1.673	-0.159	-0.46	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	1.8514 minutes	1.8321 minutes
Stnd Dev Btwn Labs	0.1475 minutes	0.3477 minutes

Statistics based on 14 of 14 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

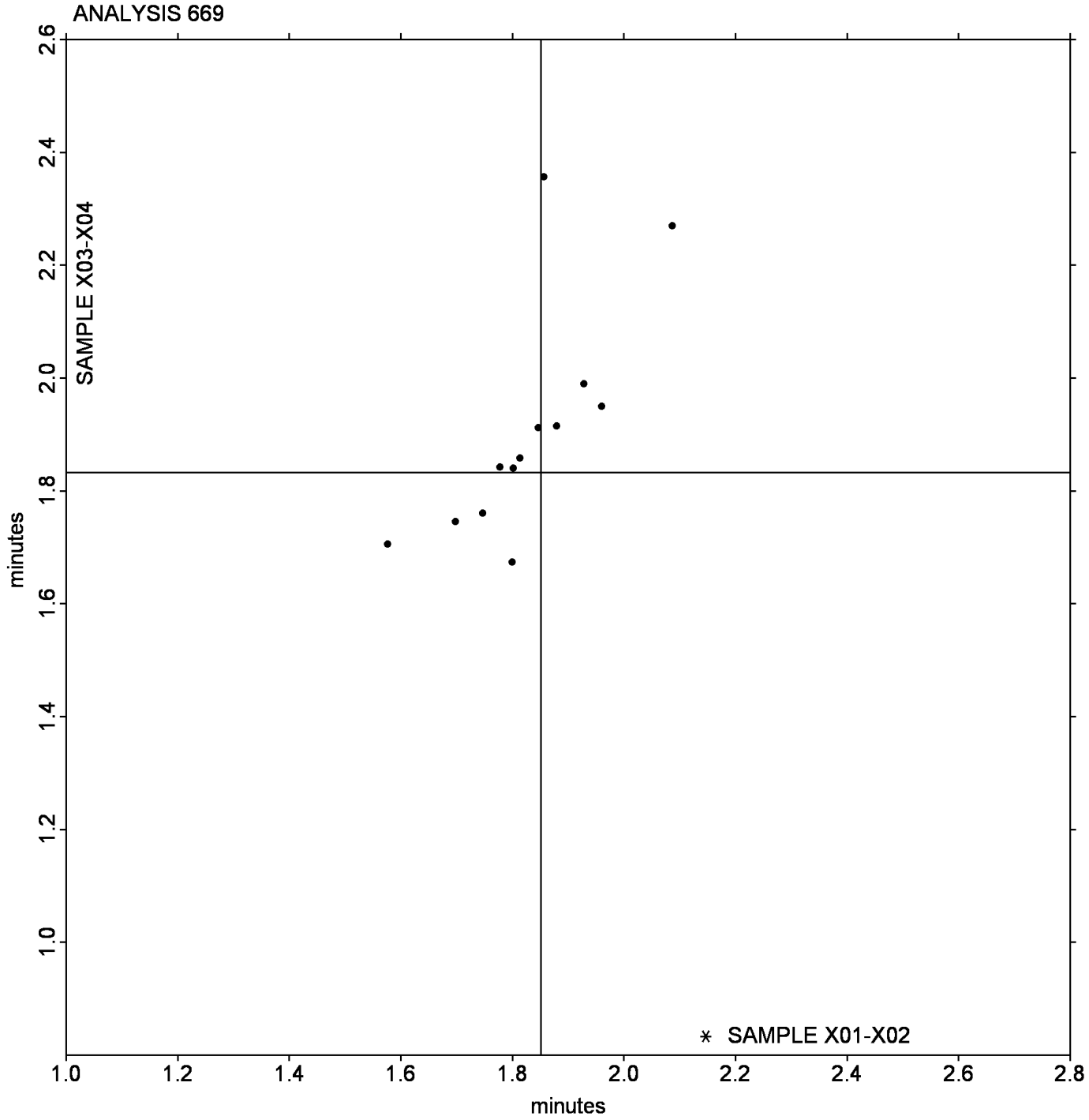
Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **X01-X02** = 1.8514 minutes

Grand Mean Sample **X03-X04** = 1.8321 minutes



Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Sample X01-X02 Diff from Grand Mean	Sample X01-X02 CPV	Sample X03-X04 Lab Mean	Sample X03-X04 Diff from Grand Mean	Sample X03-X04 CPV	Instr Code
3AF627		1.525	0.157	1.14	1.357	0.050	0.21	ZZ
4GXUCT		1.380	0.012	0.09	1.305	-0.001	-0.01	ZZ
8HUMEN		1.605	0.237	1.73	1.697	0.390	1.64	ZZ
9XWCPL		1.287	-0.082	-0.60	1.143	-0.163	-0.68	ZZ
A7WYN		1.457	0.088	0.64	1.202	-0.105	-0.44	ZZ
AGFEN6	*	1.473	0.105	0.77	1.928	0.622	2.61	ZZ
EM3DN		1.273	-0.095	-0.69	1.098	-0.208	-0.87	ZZ
KPQBQG		1.290	-0.078	-0.57	1.173	-0.133	-0.56	ZZ
NMQWM		1.323	-0.045	-0.33	1.292	-0.015	-0.06	ZZ
NMUZH		1.025	-0.343	-2.51	1.075	-0.231	-0.97	ZZ
QCY8UW		1.367	-0.002	-0.01	1.287	-0.020	-0.08	ZZ
TYXZG6		1.420	0.052	0.38	1.347	0.040	0.17	ZZ
X64VDE		1.367	-0.002	-0.01	1.283	-0.023	-0.10	ZZ
XDKFRC		1.365	-0.003	-0.02	1.103	-0.203	-0.85	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	1.3683 minutes	1.3064 minutes
Stnd Dev Btwn Labs	0.1370 minutes	0.2382 minutes

Statistics based on 14 of 14 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

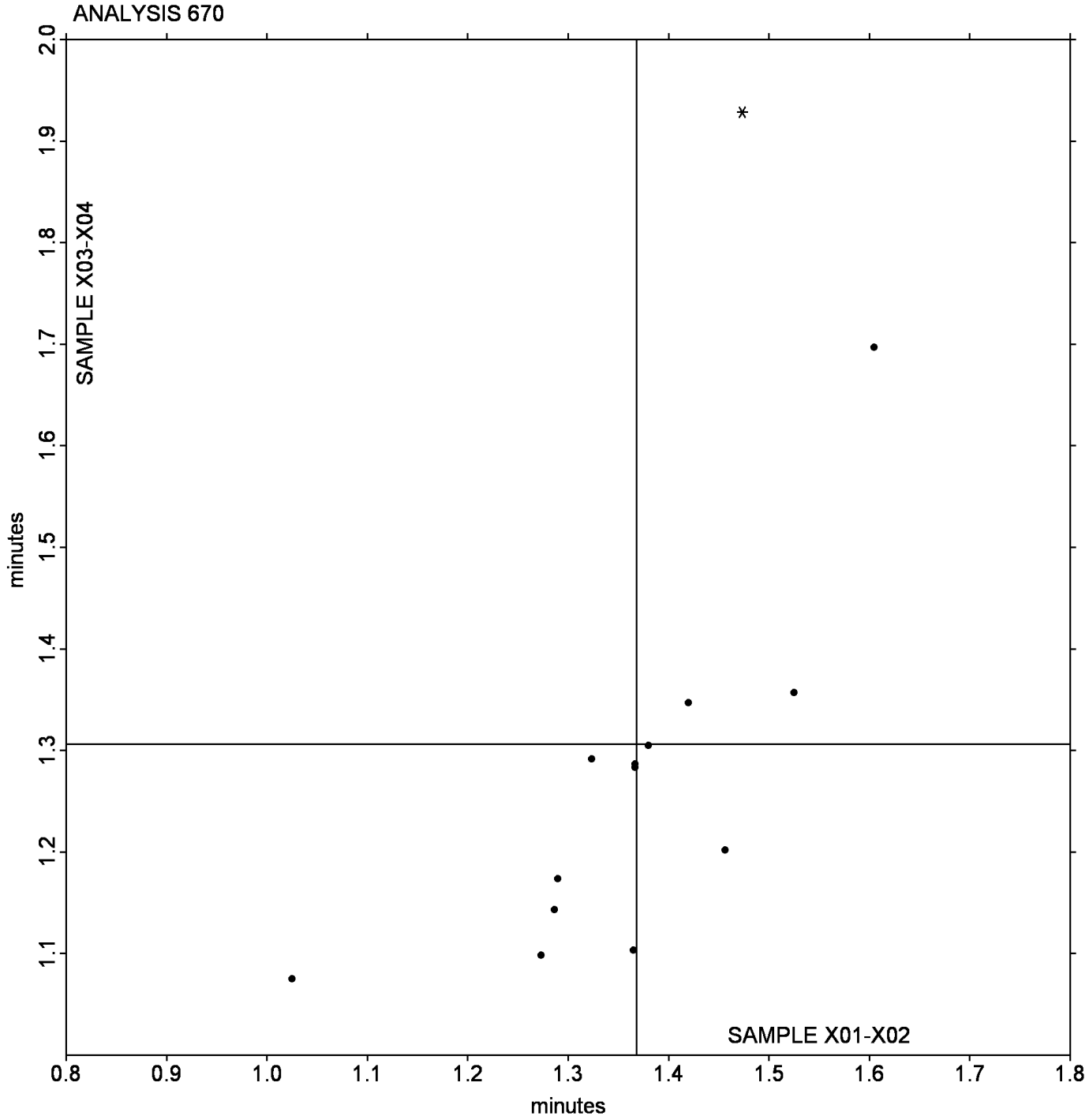
Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **X01-X02** = 1.3683 minutes

Grand Mean Sample **X03-X04** = 1.3064 minutes



Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Diff from Grand Mean	CPV	Sample X03-X04 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2CJP4K		3.423	-0.010	-0.04	3.957	-0.135	-0.53	ZZ
2VPKLK		3.277	-0.157	-0.68	3.892	-0.200	-0.79	ZZ
422F2D		3.370	-0.063	-0.28	3.907	-0.185	-0.73	ZZ
4A8N47		3.227	-0.207	-0.90	3.822	-0.270	-1.07	ZZ
C6YTNG		3.203	-0.230	-1.01	3.900	-0.191	-0.76	ZZ
CVJBFN		3.305	-0.128	-0.56	4.040	-0.051	-0.20	ZZ
EM6FM		3.480	0.047	0.20	3.910	-0.181	-0.72	ZZ
L7AYPV		3.375	-0.059	-0.26	4.128	0.037	0.15	ZZ
TNL9CF		3.533	0.100	0.44	4.173	0.082	0.33	ZZ
UPMXV6		3.527	0.093	0.41	4.220	0.129	0.51	ZZ
W8FB8F		3.402	-0.032	-0.14	4.195	0.104	0.41	ZZ
YQJPTZ		3.142	-0.292	-1.28	3.787	-0.305	-1.21	ZZ
YUHZPZ		3.772	0.338	1.48	4.395	0.304	1.21	ZZ
YWZQP		4.038	0.605	2.65	4.692	0.600	2.39	ZZ
ZWKHY		3.425	-0.008	-0.04	4.352	0.260	1.04	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	3.4332 minutes	4.0912 minutes
Stnd Dev Btwn Labs	0.2286 minutes	0.2515 minutes

Statistics based on 15 of 15 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

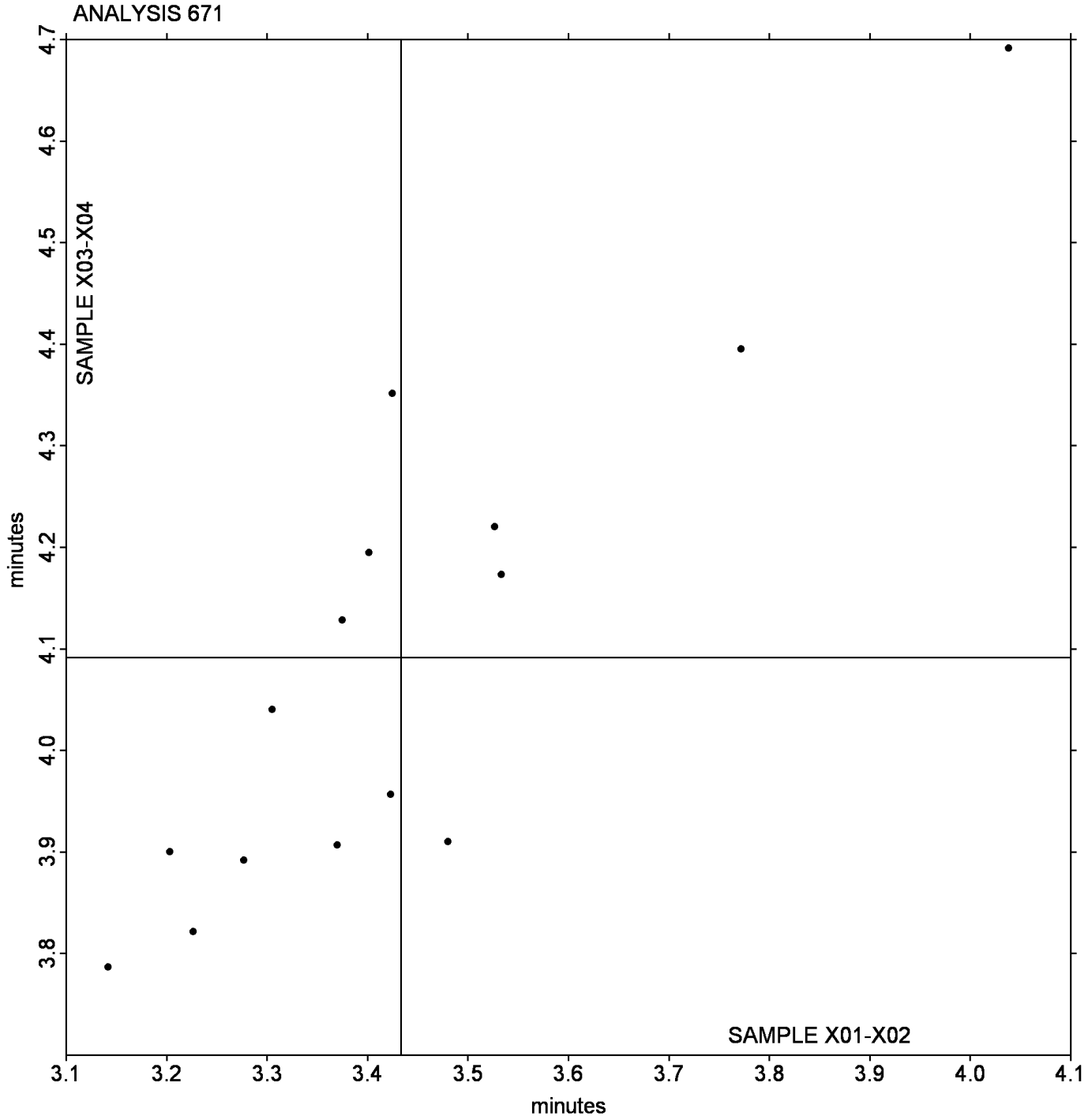
Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **X01-X02** = 3.4332 minutes

Grand Mean Sample **X03-X04** = 4.0912 minutes



Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Sample X01-X02 Diff from Grand Mean	Sample X01-X02 CPV	Sample X03-X04 Lab Mean	Sample X03-X04 Diff from Grand Mean	Sample X03-X04 CPV	Instr Code
28YFHV		10.37	-1.10	-1.00	9.958	0.904	1.04	ZZ
BPJGZB		11.30	-0.17	-0.15	7.917	-1.137	-1.31	ZZ
C6B6ZL		12.78	1.31	1.19	9.142	0.088	0.10	ZZ
CLFZ8E		11.42	-0.05	-0.05	9.552	0.498	0.57	ZZ
EKMLF8		12.07	0.60	0.55	8.973	-0.081	-0.09	ZZ
JPW7WG		10.65	-0.82	-0.74	7.827	-1.227	-1.42	ZZ
LHZFUG		10.47	-1.00	-0.91	8.603	-0.451	-0.52	ZZ
M2HKKQ		12.06	0.60	0.54	9.655	0.601	0.69	ZZ
P9NMJH		10.83	-0.64	-0.58	8.998	-0.056	-0.06	ZZ
UG46WZ		13.25	1.79	1.62	11.178	2.124	2.45	ZZ
UJEEDH		11.62	0.16	0.14	9.148	0.094	0.11	ZZ
UNCRDE		9.00	-2.47	-2.24	7.902	-1.152	-1.33	ZZ
WYYLL3		12.79	1.32	1.20	9.287	0.233	0.27	ZZ
YK6U9G		11.86	0.39	0.35	9.028	-0.026	-0.03	ZZ
ZUCW62		11.54	0.07	0.07	8.640	-0.414	-0.48	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	11.465 minutes	9.0539 minutes
Stnd Dev Btwn Labs	1.101 minutes	0.8670 minutes

Statistics based on 15 of 15 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

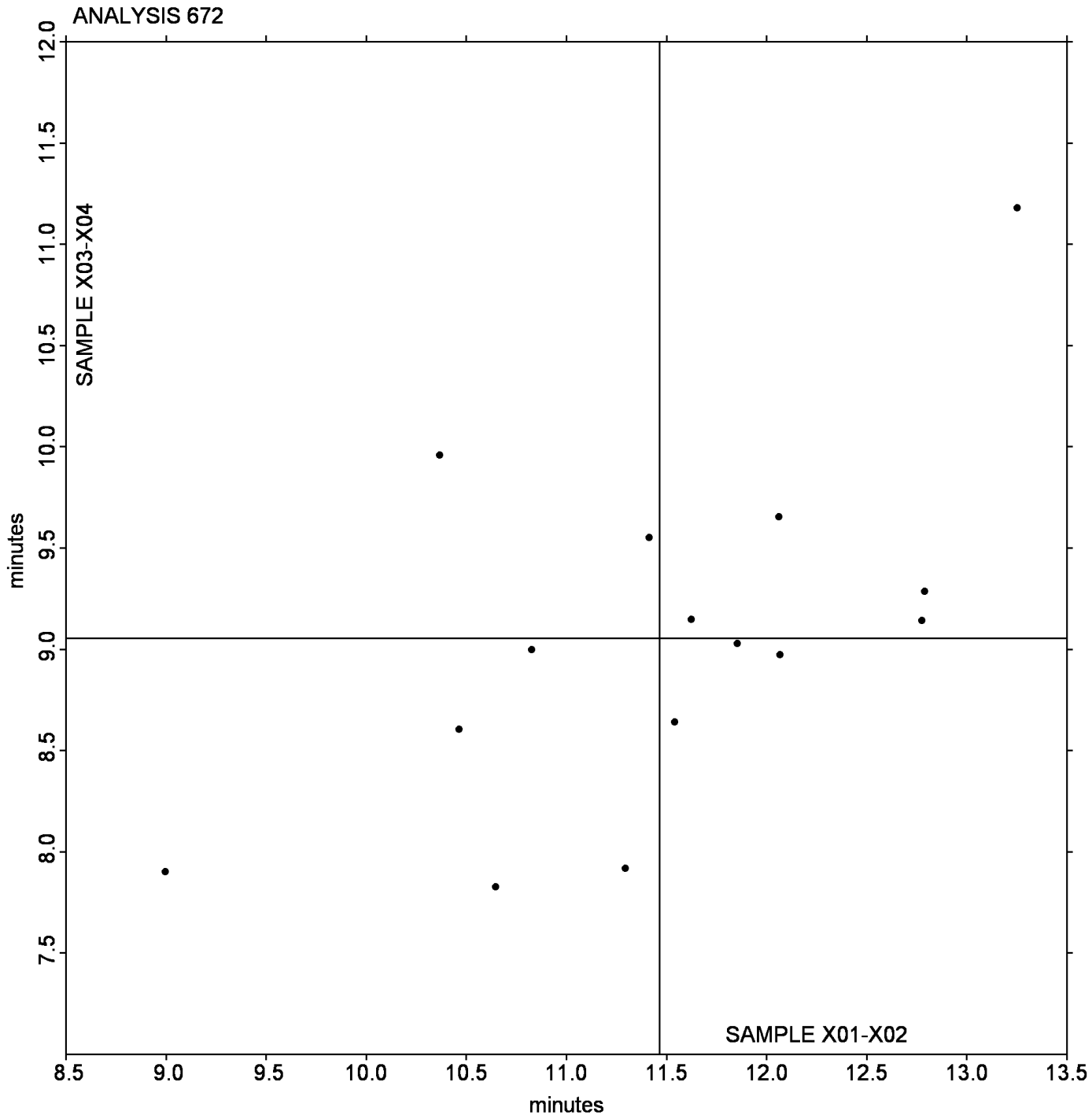
Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **X01-X02** = 11.465 minutes

Grand Mean Sample **X03-X04** = 9.0539 minutes



Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Sample X01-X02 Diff from Grand Mean	Sample X01-X02 CPV	Sample X03-X04 Lab Mean	Sample X03-X04 Diff from Grand Mean	Sample X03-X04 CPV	Instr Code
3BQJFM		5.803	-1.213	-0.55	10.11	-2.56	-0.59	ZZ
3XEQTT		6.532	-0.484	-0.22	11.27	-1.40	-0.32	ZZ
7BCWFN		7.233	0.218	0.10	16.23	3.56	0.82	ZZ
89CF76		6.298	-0.717	-0.33	12.09	-0.57	-0.13	ZZ
8VPAWP		5.808	-1.207	-0.55	9.70	-2.97	-0.68	ZZ
9F3GLN		11.265	4.249	1.93	17.31	4.64	1.07	ZZ
B67K3R		5.283	-1.732	-0.79	8.47	-4.20	-0.97	ZZ
D32XUQ		6.128	-0.887	-0.40	11.98	-0.69	-0.16	ZZ
J9Y98D		6.355	-0.661	-0.30	12.71	0.05	0.01	ZZ
L4KPGE		5.773	-1.242	-0.56	8.41	-4.26	-0.98	ZZ
Q9EAC8		4.452	-2.564	-1.16	6.74	-5.93	-1.36	ZZ
RNR4HF		5.800	-1.216	-0.55	9.35	-3.32	-0.76	ZZ
W4NUJU		8.538	1.523	0.69	22.22	9.55	2.20	ZZ
YVQD6E		7.502	0.486	0.22	18.51	5.85	1.35	ZZ
YZ77GL	*	12.465	5.449	2.48	14.88	2.22	0.51	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	7.0158 lbf.in	12.663 lbf.in
Stnd Dev Btwn Labs	2.2015 lbf.in	4.347 lbf.in

Statistics based on 15 of 15 reporting participants

Summary Statistics in SI Units

	Sample X01-X02	Sample X03-X04
Grand Means	7.9267 dN.m	14.308 dN.m
Stnd Dev Btwn Labs	2.4873 dN.m	4.912 dN.m

Statistics based on 15 of 15 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

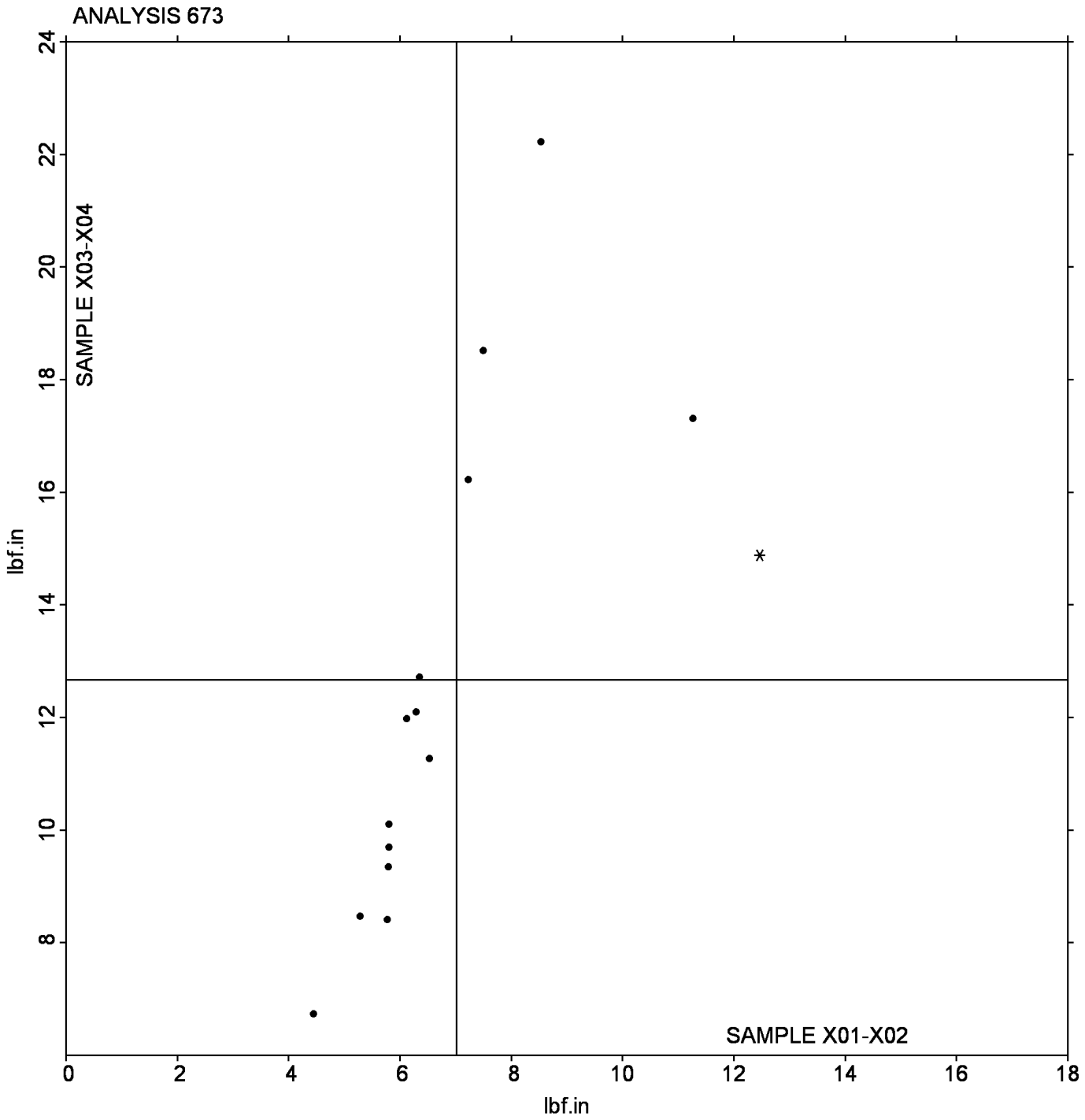
Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **X01-X02** = 7.0158 lbf.in

Grand Mean Sample **X03-X04** = 12.663 lbf.in



Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample X01-X02 Lab Mean	Sample X01-X02 Diff from Grand Mean	Sample X01-X02 CPV	Sample X03-X04 Lab Mean	Sample X03-X04 Diff from Grand Mean	Sample X03-X04 CPV	Instr Code
2EKD7H		45.34	5.63	1.15	43.69	3.79	0.90	ZZ
9JX9KU		36.77	-2.95	-0.60	38.89	-1.01	-0.24	ZZ
A3XHBW		51.54	11.82	2.42	50.38	10.48	2.50	ZZ
BKLVDE		37.10	-2.62	-0.54	44.68	4.78	1.14	ZZ
C6DD4K		38.84	-0.88	-0.18	38.68	-1.22	-0.29	ZZ
CALEAV		34.29	-5.43	-1.11	34.13	-5.77	-1.38	ZZ
GH2WM		35.92	-3.80	-0.78	38.32	-1.58	-0.38	ZZ
HT46RN		38.73	-0.99	-0.20	38.29	-1.61	-0.38	ZZ
JGML66		35.06	-4.66	-0.95	38.84	-1.06	-0.25	ZZ
NAQX2F		44.08	4.37	0.89	40.25	0.35	0.08	ZZ
QATL6B		39.78	0.06	0.01	39.67	-0.23	-0.06	ZZ
RNVZ9K		39.86	0.14	0.03	39.80	-0.10	-0.02	ZZ
TNGPB6		33.67	-6.05	-1.24	32.34	-7.56	-1.80	ZZ
VEA7BU		40.22	0.50	0.10	40.24	0.34	0.08	ZZ
ZC7EBV		44.58	4.87	1.00	40.30	0.40	0.09	ZZ

Summary Statistics

	Sample X01-X02	Sample X03-X04
Grand Means	39.718 lbf.in	39.900 lbf.in
Stnd Dev Btwn Labs	4.883 lbf.in	4.197 lbf.in

Statistics based on 15 of 15 reporting participants

Summary Statistics in SI Units

	Sample X01-X02	Sample X03-X04
Grand Means	44.875 dN.m	45.081 dN.m
Stnd Dev Btwn Labs	5.517 dN.m	4.742 dN.m

Statistics based on 15 of 15 reporting participants

Samples X01-X02: EPDM compound #1 & X03-X04: EPDM compound #2

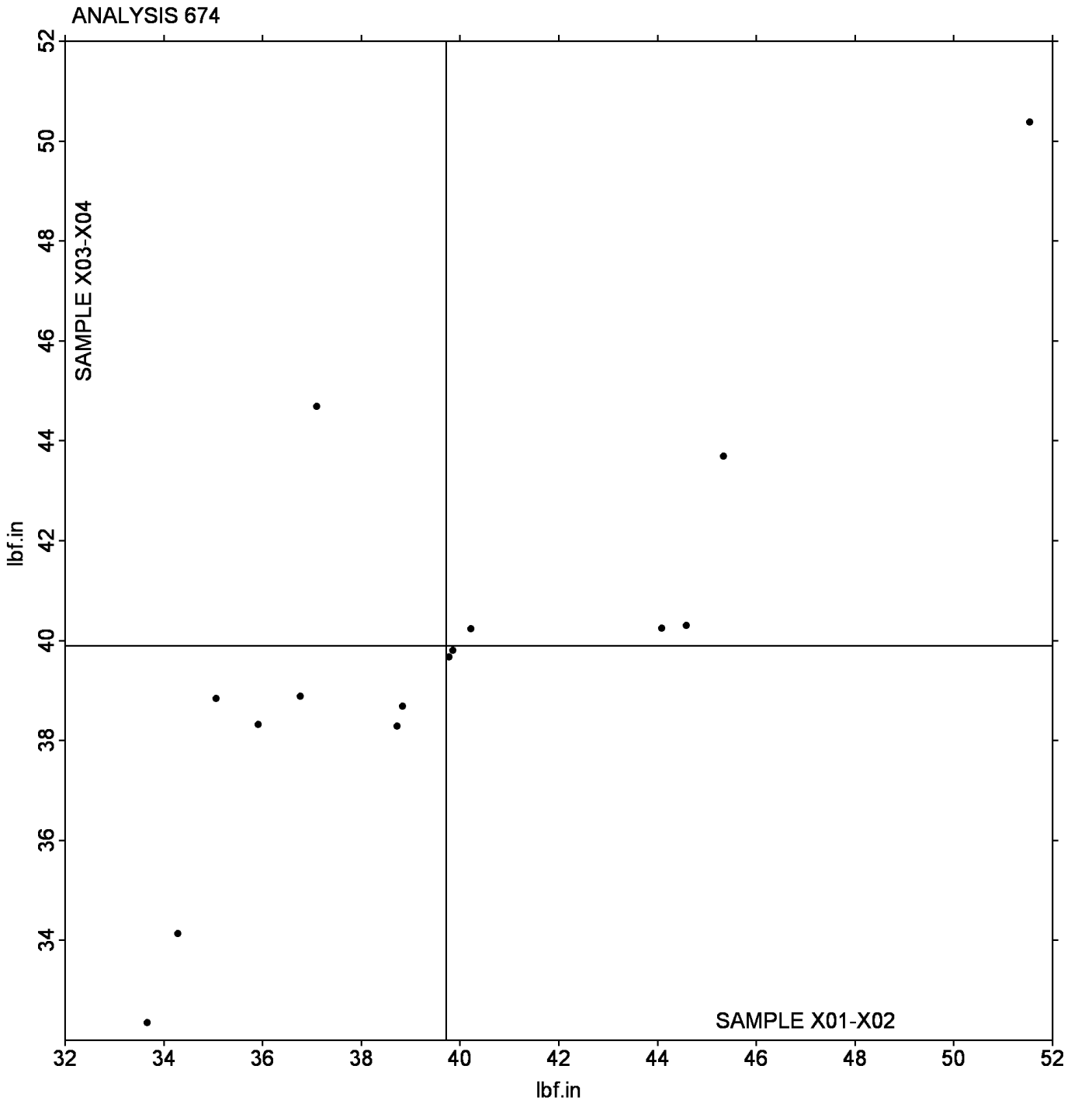
Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **X01-X02** = 39.718 lbf.in

Grand Mean Sample **X03-X04** = 39.900 lbf.in



Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
42U4T3		1.123	-0.033	-0.66	1.125	-0.030	-0.60	MC
4BB38K		1.182	0.026	0.52	1.133	-0.021	-0.43	TP
679BCZ		1.053	-0.103	-2.08	1.037	-0.118	-2.41	MC
8GQ7TY		1.180	0.024	0.49	1.177	0.022	0.45	MC
99PDVP		1.119	-0.037	-0.74	1.117	-0.038	-0.77	MC
AWVUT		1.213	0.057	1.16	1.228	0.074	1.51	MC
B8MH3W		1.055	-0.101	-2.05	1.082	-0.073	-1.49	MD
BM4UW		1.153	-0.003	-0.05	1.155	0.000	0.01	MC
CW7T8V		1.130	-0.026	-0.53	1.145	-0.010	-0.19	MC
DGLYNJ		1.119	-0.037	-0.74	1.131	-0.024	-0.49	MC
DTBDNT		1.187	0.031	0.62	1.183	0.029	0.59	MC
GL33ZX		1.080	-0.076	-1.54	1.080	-0.075	-1.52	TP
JYHH28		1.100	-0.056	-1.14	1.106	-0.049	-1.00	MC
KRBVK4		1.262	0.106	2.14	1.233	0.079	1.61	MD
MBZTY2		1.207	0.051	1.03	1.192	0.037	0.76	MC
MHZ3E7		1.202	0.046	0.93	1.197	0.042	0.86	MC
PTULYB		1.133	-0.023	-0.46	1.120	-0.035	-0.71	MC
RHHFD9		1.165	0.009	0.18	1.165	0.010	0.21	MC
RLNLKT		1.188	0.032	0.66	1.148	-0.006	-0.13	TP
TFKXMJ		1.178	0.022	0.45	1.157	0.002	0.04	XX
TG7XCF		1.175	0.019	0.38	1.192	0.037	0.76	TP
VRZYTZ		1.228	0.072	1.47	1.238	0.084	1.71	XX
X6HFTJ		1.153	-0.003	-0.05	1.130	-0.025	-0.50	MC
YVA4E2		1.163	0.007	0.15	1.138	-0.016	-0.33	MC
ZF86CN		1.135	-0.021	-0.43	1.140	-0.015	-0.30	MC
ZGL4FQ		1.137	-0.019	-0.39	1.157	0.002	0.04	MC
ZH78UP		1.150	-0.006	-0.12	1.192	0.037	0.76	MC
ZMTD22		1.197	0.041	0.82	1.230	0.075	1.54	MC

Summary Statistics

	Sample X05-X06	Sample X07-X08
Grand Means	1.1560 minutes	1.1545 minutes
Stnd Dev Btwn Labs	0.0493 minutes	0.0489 minutes

Statistics based on 28 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

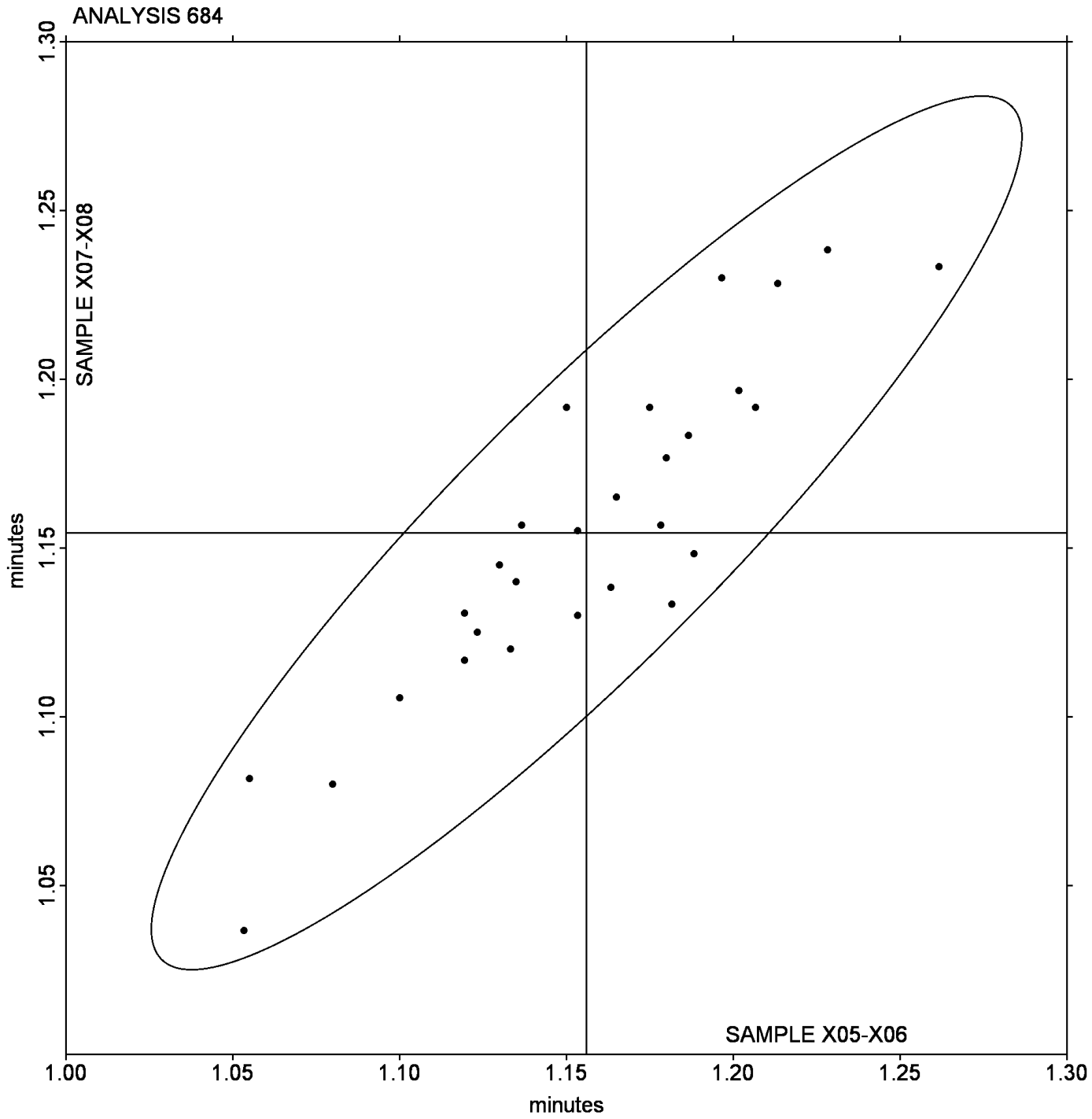
Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **X05-X06** = 1.1560 minutes

Grand Mean Sample **X07-X08** = 1.1545 minutes



Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
2YGFY8		1.123	0.105	1.29	1.100	0.095	1.32	TP
6RJ382		1.112	0.094	1.14	1.082	0.077	1.07	MC
7PH7PC		1.033	0.015	0.19	0.997	-0.008	-0.12	MC
7YFG9T		0.998	-0.020	-0.24	0.987	-0.018	-0.26	MC
9H9BFF		1.228	0.210	2.57	1.177	0.172	2.39	MD
9ZU92N		1.028	0.010	0.12	1.006	0.001	0.01	MC
B2RAFU		1.053	0.035	0.43	1.042	0.037	0.51	MC
CECLCJ		1.000	-0.018	-0.22	0.990	-0.015	-0.21	MC
CK869N		1.055	0.037	0.45	1.027	0.022	0.30	MC
CNKTYR	X	0.868	-0.150	-1.83	0.717	-0.288	-4.02	MC
D9H2KV		1.032	0.014	0.17	1.047	0.042	0.58	MC
DWWFX		1.080	0.062	0.76	1.000	-0.005	-0.07	TP
DYUPGZ		0.930	-0.088	-1.08	0.912	-0.093	-1.30	TP
GLHNQ8		0.888	-0.130	-1.58	0.893	-0.112	-1.56	MC
H3MN39		0.925	-0.093	-1.14	0.925	-0.080	-1.12	MC
HXRGG7		1.167	0.149	1.82	1.137	0.132	1.84	MC
JMXCB6		1.093	0.075	0.92	1.015	0.010	0.14	TP
JWRQVA		1.062	0.044	0.53	1.053	0.048	0.67	MC
K6N8ML		1.003	-0.015	-0.18	0.987	-0.018	-0.26	MC
NKBNZ9		0.981	-0.037	-0.46	0.981	-0.024	-0.34	MC
QD4U3G		0.980	-0.038	-0.47	0.990	-0.015	-0.21	MC
RJP4PK		1.073	0.055	0.68	1.053	0.048	0.67	XX
RKXELN		1.023	0.005	0.06	1.007	0.002	0.02	MC
RQGE99		0.992	-0.026	-0.32	0.998	-0.007	-0.09	MC
RTZKDX		0.917	-0.101	-1.24	0.950	-0.055	-0.77	MC
WJ74L4		0.897	-0.121	-1.48	0.872	-0.133	-1.86	MC
XDE7HY		0.905	-0.113	-1.38	0.892	-0.113	-1.58	XX
Y3FBUB		0.919	-0.099	-1.21	0.927	-0.078	-1.09	MC
YN6TV3		1.040	0.022	0.27	1.078	0.073	1.02	MC
YNCPRL		1.048	0.030	0.37	1.062	0.057	0.79	MC
ZZ4C29		0.957	-0.061	-0.75	0.968	-0.037	-0.51	MD

Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Summary Statistics

Grand Means	1.0181 minutes	1.0051 minutes
Stnd Dev Btwn Labs	0.0819 minutes	0.0717 minutes

Statistics based on 30 of 31 reporting participants

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

Comments on assigned Data Flags for Test #685

CNKTYR (X) - Data for Sample set X07-X08 are high. Also inconsistent in testing within both Sample sets.

Instrument Code Listing

685 MDR Vulcanization-Scorch Time, Ts1 (minutes)

Instruments:

(MC) Alpha Technologies [Monsanto] MDR 2000 or 2000E

(MD) Alpha Tech. Rubber Process Analyzer (RPA 2000)

(MP) Alpha Technologies [Monsanto] MDR 2000P

(TP) Tech Pro MDR model MDPT

(XX) Instrument model not specified by lab

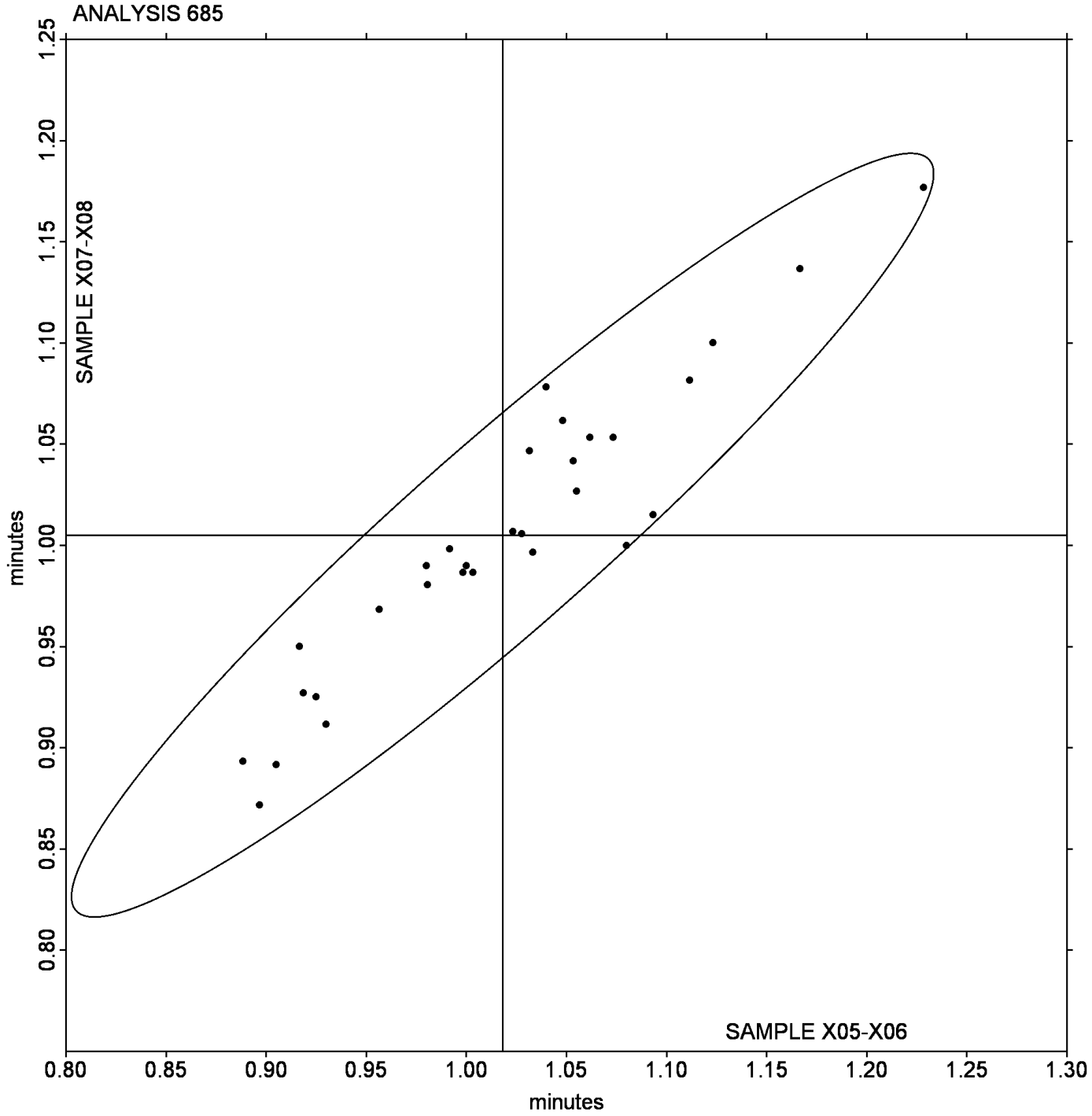
Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **X05-X06** = 1.0181 minutes

Grand Mean Sample **X07-X08** = 1.0051 minutes



Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
2G2MX3	*	3.068	-0.250	-2.32	3.038	-0.293	-2.61	MC
3PMB7B	*	3.113	-0.205	-1.90	3.158	-0.173	-1.54	TP
3WQH4L		3.248	-0.070	-0.65	3.255	-0.076	-0.68	MC
3YUFCT		3.363	0.045	0.42	3.390	0.059	0.52	MC
43GWDJ		3.248	-0.070	-0.65	3.238	-0.093	-0.83	TP
6L8RNZ		3.393	0.075	0.70	3.408	0.077	0.69	MC
7QEXEP		3.340	0.022	0.20	3.370	0.039	0.35	XX
89866A		3.298	-0.020	-0.18	3.300	-0.031	-0.28	MC
AHTRCG		3.411	0.093	0.86	3.417	0.086	0.76	MC
B9GYM6		3.347	0.029	0.27	3.342	0.011	0.09	MC
BD9FQK		3.353	0.035	0.32	3.383	0.052	0.47	MC
DAVJUR		3.200	-0.118	-1.10	3.205	-0.126	-1.12	MC
FC8YNV		3.242	-0.076	-0.71	3.257	-0.074	-0.66	XX
G6ZWW3		3.285	-0.033	-0.31	3.290	-0.041	-0.37	TP
G9VM3D		3.264	-0.054	-0.50	3.303	-0.028	-0.25	MC
KUATEX		3.448	0.130	1.21	3.467	0.136	1.21	MC
L62FNL		3.282	-0.036	-0.34	3.293	-0.038	-0.34	MD
LKHRHK		3.348	0.030	0.28	3.322	-0.009	-0.08	MC
NTZG6C		3.210	-0.108	-1.00	3.220	-0.111	-0.99	MC
P693QB		3.430	0.112	1.04	3.438	0.107	0.95	MC
P7T9VZ		3.492	0.174	1.61	3.535	0.204	1.82	MC
PLEKKG		3.447	0.129	1.19	3.483	0.152	1.36	MC
PRXAXH		3.480	0.162	1.50	3.453	0.122	1.09	TP
QKBRZ9		3.335	0.017	0.16	3.355	0.024	0.21	MC
UTG6TT		3.273	-0.045	-0.42	3.280	-0.051	-0.46	MC
V3XFD6		3.463	0.145	1.35	3.480	0.149	1.33	MC
VEVCGR		3.140	-0.178	-1.65	3.133	-0.198	-1.76	MD
W2QPA3		3.248	-0.070	-0.65	3.297	-0.034	-0.31	MC
WBW8M		3.322	0.004	0.03	3.354	0.023	0.21	MC
Y9E2ZT		3.438	0.120	1.12	3.440	0.109	0.97	MC
ZKRUA7		3.330	0.012	0.11	3.360	0.029	0.26	MC

Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Summary Statistics

Grand Means	3.3181 minutes	3.3311 minutes
Stnd Dev Btwn Labs	0.1077 minutes	0.1123 minutes

Statistics based on 31 of 31 reporting participants

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

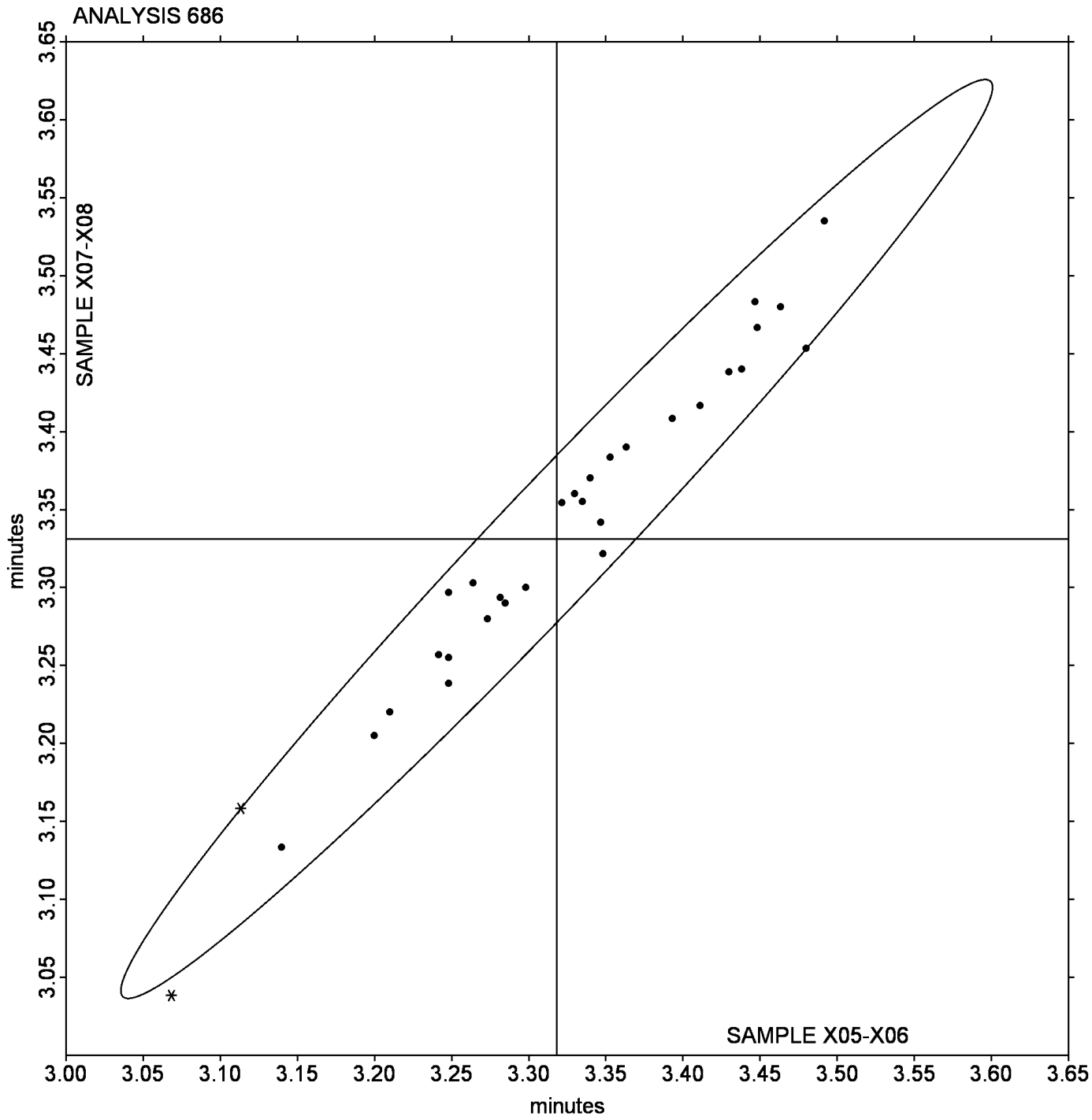
Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **X05-X06** = 3.3181 minutes

Grand Mean Sample **X07-X08** = 3.3311 minutes



Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
2LZDQG		6.088	-0.510	-2.37	6.035	-0.508	-2.25	MD
3VPAPM		6.955	0.357	1.65	6.957	0.414	1.83	MC
4PZN42		6.922	0.323	1.50	6.903	0.361	1.60	MC
62V7JK		6.583	-0.015	-0.07	6.528	-0.015	-0.06	MC
6GN2WB		6.550	-0.048	-0.22	6.437	-0.106	-0.47	MC
6QV3DH		6.677	0.078	0.36	6.638	0.096	0.42	MC
6T7VRH		6.388	-0.210	-0.98	6.310	-0.233	-1.03	XX
7EVRHF		6.375	-0.223	-1.04	6.370	-0.173	-0.76	MD
8L6V9D		6.248	-0.350	-1.62	6.192	-0.351	-1.55	MC
8YKYD		6.893	0.295	1.37	6.868	0.326	1.44	MC
9N2RCM		6.533	-0.065	-0.30	6.442	-0.101	-0.45	MC
B9CE6N		6.433	-0.165	-0.77	6.412	-0.131	-0.58	MC
BEJQGN		6.467	-0.132	-0.61	6.442	-0.101	-0.45	MC
BUJHQY		6.675	0.077	0.35	6.628	0.086	0.38	MC
CVADVY		6.758	0.160	0.74	6.628	0.086	0.38	XX
CXVDKV		6.813	0.215	1.00	6.733	0.191	0.84	TP
DRZKNY	X	5.930	-0.668	-3.10	6.103	-0.439	-1.94	TP
DUC62T		6.518	-0.080	-0.37	6.420	-0.123	-0.54	MC
DWB2DA		6.550	-0.048	-0.22	6.465	-0.078	-0.34	XX
EGJFMZ		6.472	-0.127	-0.59	6.388	-0.154	-0.68	XX
G39CRB		6.617	0.018	0.08	6.582	0.039	0.17	MC
HK4VCG		6.570	-0.028	-0.13	6.542	-0.001	0.00	MC
HPTGL6		6.845	0.247	1.14	6.840	0.297	1.32	MC
KBTPGK		6.578	-0.020	-0.09	6.522	-0.021	-0.09	MC
LND2DA		6.600	0.002	0.01	6.518	-0.024	-0.11	MC
QGZMUT		6.323	-0.275	-1.28	6.272	-0.271	-1.20	TP
UTXUYZ		6.561	-0.037	-0.17	6.539	-0.004	-0.02	MC
XZ9BYW		7.020	0.422	1.96	6.983	0.441	1.95	XX
YB8T9J		6.832	0.233	1.08	6.790	0.247	1.09	MC
YE6WYY		6.463	-0.135	-0.63	6.353	-0.189	-0.84	MC
ZGTJD7		6.645	0.047	0.22	6.540	-0.003	-0.01	MC

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Summary Statistics

Grand Means	6.5985 minutes	6.5426 minutes
Stnd Dev Btwn Labs	0.2155 minutes	0.2261 minutes

Statistics based on 30 of 31 reporting participants

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

Comments on assigned Data Flags for Test #687

DRZKNY (X) - Data for Sample set X05-X06 are low. Also inconsistent in testing within Sample set X07-X08.

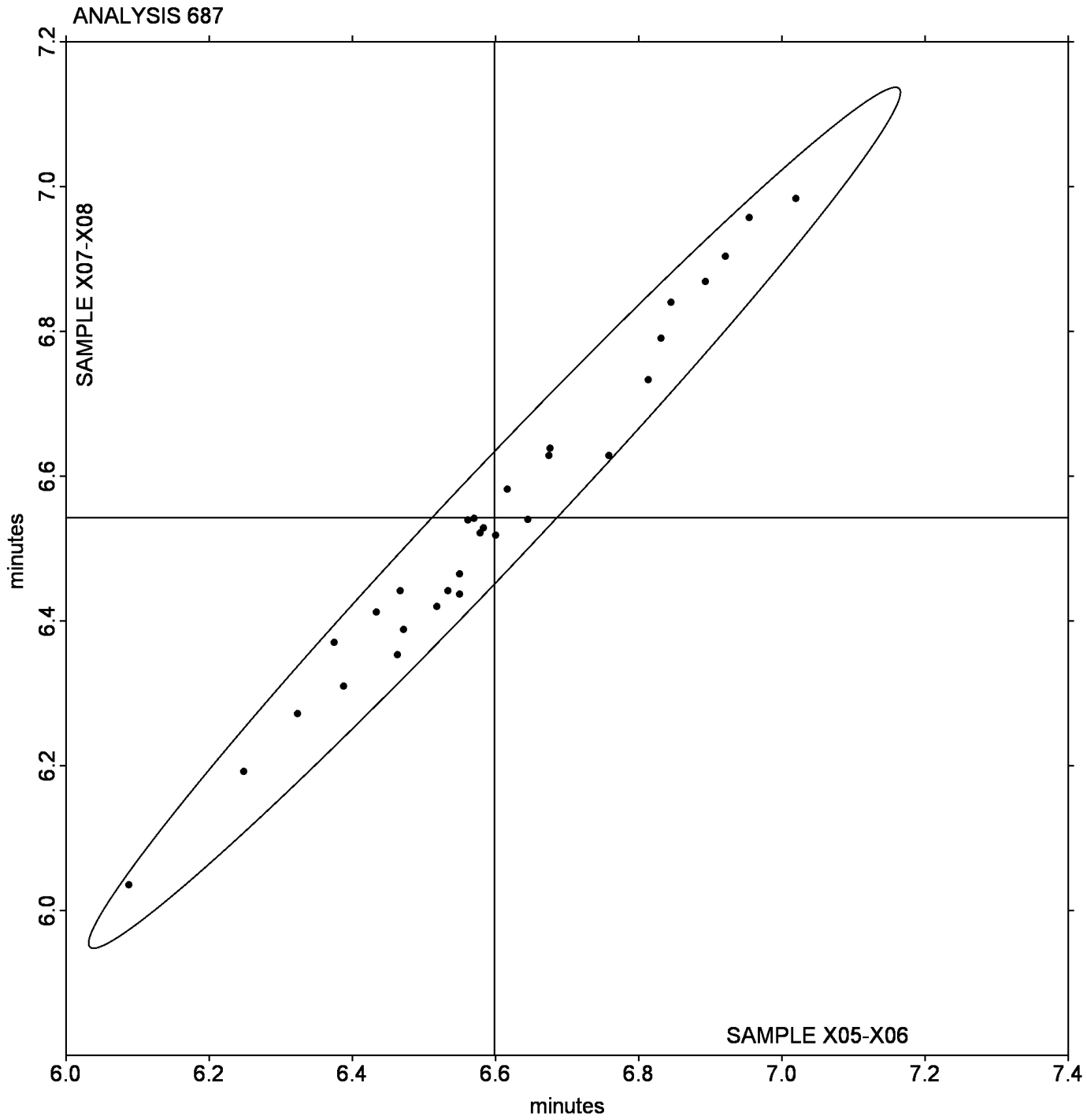
Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **X05-X06** = 6.5985 minutes

Grand Mean Sample **X07-X08** = 6.5426 minutes



Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
3UMHR9		3.248	0.579	1.19	2.955	0.569	1.20	MC
4WB2UJ		2.518	-0.151	-0.31	2.173	-0.213	-0.45	XX
7JXMM3		2.546	-0.123	-0.25	2.283	-0.102	-0.22	MC
7N8LJM		2.605	-0.064	-0.13	2.362	-0.024	-0.05	MC
8HXMJH		2.553	-0.116	-0.24	2.275	-0.111	-0.23	MC
8V8K6B		2.110	-0.559	-1.15	1.840	-0.546	-1.15	MC
97Z6M9		2.088	-0.581	-1.19	1.795	-0.591	-1.24	MD
9LFJ9X	*	2.428	-0.241	-0.49	2.328	-0.058	-0.12	MC
DU88PQ		2.477	-0.192	-0.39	2.173	-0.213	-0.45	MC
EBCUU		3.035	0.366	0.75	2.738	0.352	0.74	XX
EHPH3X		3.067	0.398	0.82	2.727	0.341	0.72	TP
F66R34		2.787	0.118	0.24	2.352	-0.034	-0.07	TP
FHJJLV	*	3.947	1.278	2.62	3.658	1.272	2.68	MD
GVVLQD		2.605	-0.064	-0.13	2.272	-0.114	-0.24	MC
KFMJG8		2.305	-0.364	-0.75	2.077	-0.309	-0.65	MC
L9EMTY	X	3.592	0.923	1.89	3.557	1.171	2.46	MC
MABRAZ		2.399	-0.271	-0.56	2.183	-0.203	-0.43	XX
MAPNLD		2.313	-0.356	-0.73	2.073	-0.313	-0.66	MC
MCAUR2		2.192	-0.477	-0.98	1.983	-0.403	-0.85	MC
NJU997		2.297	-0.372	-0.76	2.012	-0.374	-0.79	MC
NPQGMZ		2.532	-0.137	-0.28	2.267	-0.119	-0.25	MC
NTK7JQ		2.963	0.294	0.60	2.703	0.317	0.67	XX
PUXQQE	*	4.050	1.381	2.83	3.838	1.452	3.06	MC
PVGELF		2.363	-0.306	-0.63	2.130	-0.256	-0.54	MC
QETEEG		2.185	-0.484	-0.99	1.938	-0.448	-0.94	TP
RE8NXL		3.214	0.545	1.12	2.891	0.505	1.06	MC
T8E297		2.187	-0.482	-0.99	1.945	-0.441	-0.93	MC
V36WVK		2.895	0.226	0.46	2.480	0.094	0.20	MC
VEZXGY		2.907	0.238	0.49	2.509	0.123	0.26	XX
XHA32Z		2.883	0.214	0.44	2.503	0.117	0.25	MC
XPAF68		2.373	-0.296	-0.61	2.111	-0.275	-0.58	MC

Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Summary Statistics

Grand Means	2.6691 lbf.in	2.3858 lbf.in
Stnd Dev Btwn Labs	0.4874 lbf.in	0.4754 lbf.in

Statistics based on 30 of 31 reporting participants

Summary Statistics in SI Units

Grand Means	3.0157 dN.m	2.6956 dN.m
Stnd Dev Btwn Labs	0.5507 dN.m	0.5371 dN.m

Statistics based on 30 of 31 reporting participants

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

Comments on assigned Data Flags for Test #688

L9EMTY (X) - Inconsistency in testing between Sample sets. Also inconsistent in testhing within SampleX07-X08.

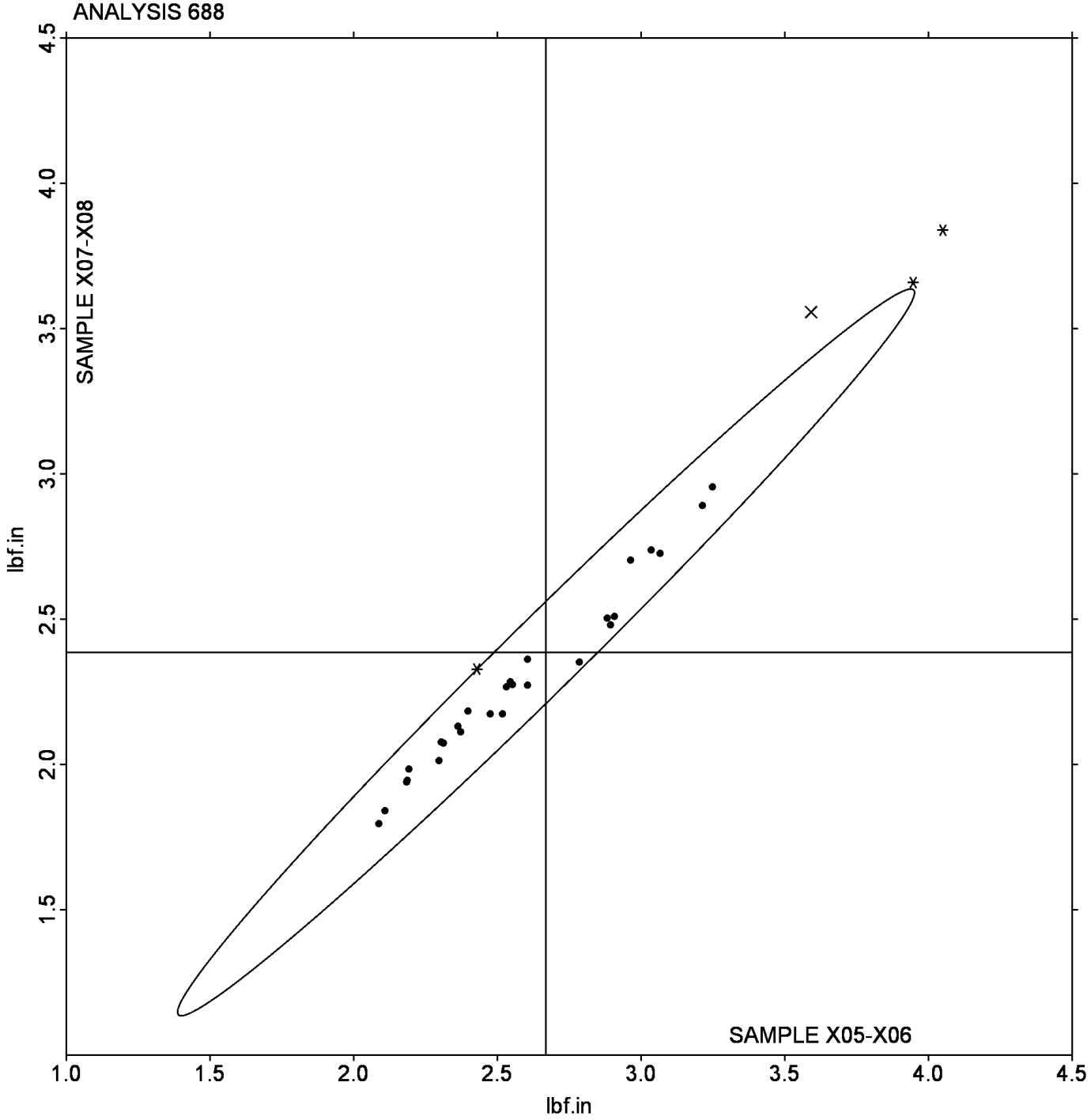
Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **X05-X06** = 2.6691 lbf.in

Grand Mean Sample **X07-X08** = 2.3858 lbf.in



Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample X05-X06 Lab Mean	Sample X05-X06 Diff from Grand Mean	Sample X05-X06 CPV	Sample X07-X08 Lab Mean	Sample X07-X08 Diff from Grand Mean	Sample X07-X08 CPV	Instr Code
3P7HA2		15.45	0.92	1.25	15.38	0.96	1.33	MC
4ADBYY		15.00	0.48	0.65	14.97	0.54	0.75	MC
4CGBC7		14.49	-0.04	-0.05	14.45	0.03	0.04	MD
4W2Z3J		14.90	0.38	0.51	14.82	0.40	0.55	MC
94XYBL	*	16.85	2.32	3.15	16.60	2.17	3.03	XX
9EWHK9		14.40	-0.13	-0.17	14.27	-0.16	-0.22	MC
A93YP4		15.27	0.74	1.01	15.17	0.75	1.04	MC
ARZ4MX		14.84	0.32	0.43	14.61	0.18	0.25	MC
BPP337		13.50	-1.02	-1.39	13.36	-1.07	-1.48	MD
CJXEK7		14.23	-0.30	-0.41	14.29	-0.13	-0.19	TP
EJ66U9		14.73	0.20	0.27	14.61	0.18	0.25	XX
EQNGX2		14.56	0.03	0.04	14.27	-0.16	-0.22	MC
EZC8LE		13.90	-0.62	-0.85	13.74	-0.68	-0.95	MC
HDKK6A		14.47	-0.05	-0.07	14.38	-0.04	-0.06	MC
J86JXJ		14.18	-0.34	-0.46	14.10	-0.33	-0.45	MC
LBQWZC		14.38	-0.15	-0.20	14.05	-0.38	-0.52	MC
MAQB6G		14.18	-0.34	-0.46	14.08	-0.35	-0.48	MC
MVVLD	*	15.35	0.82	1.11	15.59	1.16	1.62	XX
MZZZPP		15.55	1.02	1.39	15.45	1.02	1.42	TP
NX2UDH		14.06	-0.46	-0.63	13.87	-0.56	-0.78	MC
PM4VBA		14.37	-0.15	-0.21	14.31	-0.12	-0.17	MC
R4TXBX		15.15	0.62	0.84	14.96	0.53	0.74	MC
TXY24X		14.19	-0.33	-0.45	14.07	-0.36	-0.50	MC
UCG64R		13.72	-0.81	-1.10	13.83	-0.60	-0.83	XX
UKEDQP		14.72	0.19	0.26	14.76	0.33	0.46	MC
WLR9X3		14.29	-0.23	-0.32	14.07	-0.35	-0.49	MC
XVUY6		14.11	-0.42	-0.57	13.99	-0.44	-0.61	MC
XW86LC		14.50	-0.02	-0.03	14.20	-0.23	-0.32	XX
Y8G6H7		14.47	-0.06	-0.08	14.38	-0.05	-0.07	MC
YYT6B9	*	12.73	-1.79	-2.43	12.97	-1.46	-2.03	TP
ZY44MA		13.76	-0.76	-1.04	13.63	-0.80	-1.11	MC

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Summary Statistics

Grand Means	14.526 lbf.in	14.426 lbf.in
Stnd Dev Btwn Labs	0.737 lbf.in	0.719 lbf.in

Statistics based on 31 of 31 reporting participants

Summary Statistics in SI Units

Grand Means	16.412 dN.m	16.299 dN.m
Stnd Dev Btwn Labs	0.832 dN.m	0.812 dN.m

Statistics based on 31 of 31 reporting participants

Samples X05-X06: EPDM compound, batch #1 & X07-X08: EPDM compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **X05-X06** = 14.526 lbf.in

Grand Mean Sample **X07-X08** = 14.426 lbf.in