Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #184 - 2nd Qtr 2015

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
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

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.

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
2Q9T88		3,525.0	56.0	0.37	3,513.0	72.7	0.47	ZZ
34FZM4		3,353.0	-116.0	-0.76	3,271.0	-169.3	-1.08	ZZ
3A4LT6		3,285.1	-183.9	-1.20	3,219.9	-220.4	-1.41	ZZ
3LFB9L		3,560.5	91.5	0.60	3,586.0	145.7	0.93	ZZ
3Y2P9E		3,560.5	91.5	0.60	3,485.0	44.7	0.29	ZZ
46MXAK		3,597.5	128.5	0.84	3,621.0	180.7	1.16	ZZ
4RFPUM		3,458.0	-11.0	-0.07	3,399.5	-40.8	-0.26	ZZ
63WTGD		3,702.5	233.5	1.52	3,666.0	225.7	1.45	ZZ
6BNCTZ		3,447.5	-21.5	-0.14	3,372.5	-67.8	-0.43	ZZ
6CHYAB		3,394.0	-75.0	-0.49	3,395.0	-45.3	-0.29	ZZ
6W7LRC		3,467.5	-1.5	-0.01	3,407.0	-33.3	-0.21	ZZ
76VVFD		3,465.7	-3.3	-0.02	3,539.0	98.7	0.63	ZZ
7MFKQT		3,657.3	188.3	1.23	3,533.1	92.8	0.59	ZZ
7P6QA6		3,604.0	135.0	0.88	3,545.5	105.2	0.67	ZZ
8EGCMD		3,603.5	134.5	0.88	3,566.5	126.2	0.81	ZZ
8TX83A		3,617.6	148.5	0.97	3,581.1	140.8	0.90	ZZ
94BULA		3,488.9	19.8	0.13	3,555.8	115.5	0.74	ZZ
9EU4CN	X	3,043.1	-426.0	-2.78	3,187.8	-252.5	-1.62	ZZ
9JRP3R		3,336.0	-133.0	-0.87	3,227.0	-213.3	-1.37	ZZ
9WXLK9		3,435.0	-34.0	-0.22	3,480.0	39.7	0.25	ZZ
9YGXX4		3,316.3	-152.7	-1.00	3,340.2	-100.0	-0.64	ZZ
AHBQLM		3,622.0	153.0	1.00	3,578.5	138.2	0.88	ZZ
AZQ2A8		3,455.0	-14.0	-0.09	3,322.5	-117.8	-0.75	ZZ
C2G6VD		3,415.5	-53.5	-0.35	3,410.0	-30.3	-0.19	ZZ
C4ZYUY		3,490.0	21.0	0.14	3,535.0	94.7	0.61	ZZ
C7VKMQ		3,546.2	77.2	0.50	3,509.9	69.7	0.45	ZZ
CAT4M4		3,568.5	99.5	0.65	3,596.5	156.2	1.00	ZZ
CB2DHL		3,209.0	-260.0	-1.70	3,285.0	-155.3	-0.99	ZZ
CDQMP2		3,510.7	41.6	0.27	3,427.3	-13.0	-0.08	ZZ
CMG78G		3,350.4	-118.6	-0.77	3,372.2	-68.1	-0.44	ZZ
CMUWW		3,568.5	99.5	0.65	3,627.4	187.1	1.20	ZZ
DGMQWF	X	3,218.5	-250.5	-1.64	3,534.3	94.0	0.60	ZZ
DLJEDL	*	3,024.1	-445.0	-2.91	3,060.3	-380.0	-2.43	ZZ
DMC6HZ		3,404.8	-64.3	-0.42	3,431.6	-8.7	-0.06	ZZ
DT3FW6		3,535.0	66.0	0.43	3,492.5	52.2	0.33	ZZ
E3KEZF		3,510.0	41.0	0.27	3,485.5	45.2	0.29	ZZ
E4E67U		3,433.5	-35.5	-0.23	3,421.0	-19.3	-0.12	ZZ
EGGVPD		3,742.0	273.0	1.78	3,640.5	200.2	1.28	ZZ
EJ739P		3,474.4	5.4	0.04	3,533.2	92.9	0.59	ZZ

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Tensile Strength (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
EYK9JN		3,492.3	23.2	0.15	3,398.5	-41.8	-0.27	ZZ
F6MY47		3,473.7	4.6	0.03	3,517.2	76.9	0.49	ZZ
F88QDM		3,441.2	-27.8	-0.18	3,294.5	-145.8	-0.93	ZZ
F93AEP		3,568.0	98.9	0.65	3,518.5	78.2	0.50	ZZ
FE96W4		3,339.0	-130.0	-0.85	3,300.0	-140.3	-0.90	ZZ
G468NU		3,525.8	56.7	0.37	3,451.0	10.7	0.07	ZZ
G6ZQRG		3,420.0	-49.1	-0.32	3,249.9	-190.4	-1.22	ZZ
GATP7C	X	2,923.5	-545.5	-3.56	2,944.5	-495.8	-3.17	ZZ
GBMFCQ		3,526.6	57.6	0.38	3,546.9	106.6	0.68	ZZ
GNUNU9		3,648.7	179.6	1.17	3,646.0	205.7	1.32	ZZ
GQ693H		3,449.8	-19.3	-0.13	3,317.0	-123.2	-0.79	ZZ
HDAE8Z		3,380.5	-88.5	-0.58	3,379.8	-60.5	-0.39	ZZ
HUV3B4		3,166.5	-302.5	-1.98	3,126.0	-314.3	-2.01	ZZ
J69JKL		3,500.5	31.5	0.21	3,409.5	-30.8	-0.20	ZZ
J6C7XT		3,743.5	274.4	1.79	3,786.2	346.0	2.21	ZZ
J6D49P		3,303.8	-165.3	-1.08	3,338.6	-101.7	-0.65	ZZ
JG7KXQ		3,130.1	-338.9	-2.21	3,069.3	-371.0	-2.37	ZZ
K3ZR7D	*	3,001.5	-467.5	-3.05	2,980.5	-459.8	-2.94	ZZ
K4UHBT		3,399.3	-69.8	-0.46	3,384.3	-56.0	-0.36	ZZ
KCMPUX		3,339.0	-130.0	-0.85	3,254.0	-186.3	-1.19	ZZ
KEU64P		3,178.5	-290.5	-1.90	3,178.5	-261.7	-1.68	ZZ
KLVJNQ		3,588.2	119.2	0.78	3,638.4	198.1	1.27	ZZ
KPUXCF		3,589.7	120.7	0.79	3,480.9	40.7	0.26	ZZ
KRH8N3		3,235.0	-234.0	-1.53	3,252.0	-188.3	-1.21	ZZ
LBRN7L		3,300.5	-168.5	-1.10	3,379.9	-60.4	-0.39	ZZ
LDHVNX		3,615.0	146.0	0.95	3,608.5	168.2	1.08	ZZ
LHCMXF		3,496.0	27.0	0.18	3,446.0	5.7	0.04	ZZ
LQ7RRG		3,720.5	251.5	1.64	3,703.8	263.5	1.69	ZZ
LXLDYY		3,572.9	103.8	0.68	3,585.0	144.7	0.93	ZZ
M2K9YD		3,264.1	-204.9	-1.34	3,196.2	-244.1	-1.56	ZZ
M3EWFN		3,235.8	-233.2	-1.52	3,295.3	-145.0	-0.93	ZZ
MQJL8G		3,639.4	170.3	1.11	3,495.7	55.5	0.36	ZZ
MWMRM		3,300.2	-168.8	-1.10	3,278.5	-161.8	-1.04	ZZ
NAT3RK		3,307.0	-162.0	-1.06	3,353.0	-87.3	-0.56	ZZ
NLLL9C	X	4,635.0	1,166.0	7.62	4,221.5	781.2	5.00	ZZ
NLYBA3		3,557.5	88.4	0.58	3,609.3	169.0	1.08	ZZ
NMFDEQ		3,286.0	-183.0	-1.20	3,327.5	-112.8	-0.72	ZZ
P73DMX		3,418.6	-50.5	-0.33	3,375.8	-64.5	-0.41	ZZ
PMC6MH	X	3,556.5	87.5	0.57	3,723.0	282.7	1.81	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
PN39FP		3,611.5	142.4	0.93	3,626.0	185.7	1.19	ZZ
QPVJT4		3,517.2	48.1	0.31	3,465.0	24.7	0.16	ZZ
QVNLW4		3,527.3	58.3	0.38	3,471.5	31.2	0.20	ZZ
QXPLWZ		3,708.0	239.0	1.56	3,743.0	302.7	1.94	ZZ
RADB66		3,519.2	50.1	0.33	3,451.7	11.4	0.07	ZZ
RDDJAF		3,460.0	-9.0	-0.06	3,379.5	-60.8	-0.39	ZZ
TFYKUU		3,401.0	-68.0	-0.44	3,385.5	-54.8	-0.35	ZZ
TJV99F		3,746.0	277.0	1.81	3,686.5	246.2	1.58	ZZ
TT92ZY		3,437.4	-31.6	-0.21	3,548.4	108.1	0.69	ZZ
TVX8JA		3,738.0	269.0	1.76	3,745.5	305.2	1.95	ZZ
TW8EL3	*	3,141.0	-328.0	-2.14	3,043.5	-396.8	-2.54	ZZ
TX33ZR		3,471.8	2.8	0.02	3,380.9	-59.3	-0.38	ZZ
UA8FWJ		3,377.0	-92.0	-0.60	3,383.0	-57.3	-0.37	ZZ
UUDB72		3,424.0	-45.0	-0.29	3,316.0	-124.3	-0.80	ZZ
UXW8UR		3,638.5	169.5	1.11	3,582.0	141.7	0.91	ZZ
VBHYXR		3,331.5	-137.5	-0.90	3,230.0	-210.3	-1.35	ZZ
VEXCYE		3,511.5	42.5	0.28	3,458.0	17.7	0.11	ZZ
VFRV32		3,375.0	-94.0	-0.61	3,441.5	1.2	0.01	ZZ
VGMJGQ		3,642.5	173.5	1.13	3,598.0	157.7	1.01	ZZ
VHWQJJ		3,490.0	21.0	0.14	3,405.0	-35.3	-0.23	ZZ
W4UENK		3,450.0	-19.0	-0.12	3,380.0	-60.3	-0.39	ZZ
WJQVDH		3,573.0	104.0	0.68	3,502.5	62.2	0.40	ZZ
X3G4BD		3,593.5	124.5	0.81	3,586.5	146.2	0.94	ZZ
X7J3NR		3,678.5	209.5	1.37	3,583.5	143.2	0.92	ZZ
XQHQTR		3,657.0	188.0	1.23	3,608.5	168.2	1.08	ZZ
Y4PX74		3,517.4	48.3	0.32	3,461.4	21.1	0.13	ZZ
Y7D8HQ		3,575.0	106.0	0.69	3,575.0	134.7	0.86	ZZ
YBLQGJ		3,271.0	-198.0	-1.29	3,299.0	-141.3	-0.90	ZZ
YGWLKT		3,566.3	97.3	0.64	3,482.3	42.0	0.27	ZZ
YVR9ME		3,440.5	-28.5	-0.19	3,500.5	60.2	0.39	ZZ
ZA8QWU	*	3,580.0	111.0	0.72	3,375.5	-64.8	-0.41	ZZ
ZDQLVF		3,495.0	26.0	0.17	3,430.0	-10.3	-0.07	ZZ
ZHKFV3		3,466.4	-2.6	-0.02	3,444.7	4.4	0.03	ZZ
ZHZWRF		3,366.8	-102.2	-0.67	3,335.5	-104.8	-0.67	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Summary Statistics

Grand Means	3,469.05 psi	3,440.28 psi
Stnd Dev Btwn Labs	153.10 psi	156.20 psi

Statistics based on 107 of 112 reporting participants

Summary Statistics in SI Units

Grand Means	23.918 MPa	23.72 MPa
Stnd Dev Btwn Labs	1.056 MPa	1.08 MPa

Statistics based on 107 of 112 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #605

9EU4CN (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are low.

DGMQWE (X) - Inconsistency in testing between Sample groups.

GATP7C (X) - Data for all Samples are low. Possible systematic error.

NLLL9C (X) - Data for all Samples are high. Possible systematic error.

PMC6MH (X) - Inconsistency in testing between Sample groups.

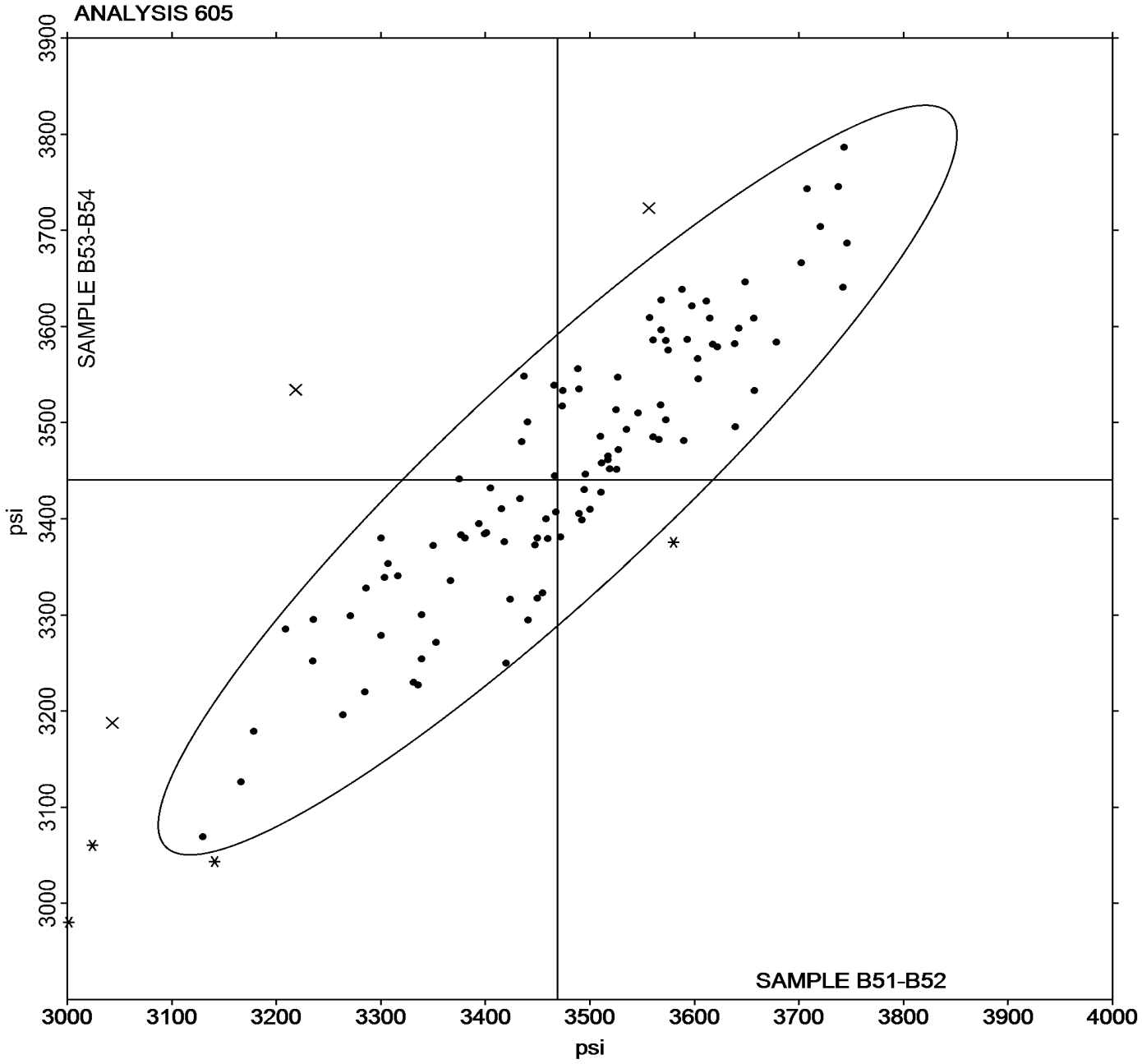
Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Grand Mean Sample **B51** = 3,469.05 psi

Grand Mean Sample **B52** = 3,440.28 psi



Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
2Q9T88		634.5	16.5	0.51	647.5	34.8	1.09	ZZ
34FZM4		626.5	8.5	0.26	621.5	8.8	0.27	ZZ
3A4LT6		562.0	-56.0	-1.74	560.0	-52.7	-1.65	ZZ
3LFB9L		665.0	47.0	1.46	648.0	35.3	1.10	ZZ
3Y2P9E		600.5	-17.5	-0.54	596.5	-16.2	-0.51	ZZ
46MXAK		630.5	12.5	0.39	637.5	24.8	0.77	ZZ
4RFPUM		665.0	47.0	1.46	657.0	44.3	1.38	ZZ
63WTGD		670.5	52.5	1.63	659.0	46.3	1.45	ZZ
6BNCTZ		599.0	-19.0	-0.59	601.5	-11.2	-0.35	ZZ
6CHYAB		605.0	-13.0	-0.40	588.0	-24.7	-0.77	ZZ
6W7LRC		636.0	18.0	0.56	635.0	22.3	0.70	ZZ
76VVFD		644.0	26.0	0.81	643.0	30.3	0.95	ZZ
7MFKQT		642.4	24.4	0.76	630.9	18.1	0.57	ZZ
7P6QA6		644.5	26.5	0.82	639.5	26.8	0.84	ZZ
8EGCMD		668.0	50.0	1.55	668.0	55.3	1.73	ZZ
8TX83A		636.2	18.3	0.57	613.6	0.9	0.03	ZZ
94BULA		632.8	14.8	0.46	644.0	31.3	0.98	ZZ
9EU4CN	*	682.7	64.7	2.01	645.4	32.7	1.02	ZZ
9JRP3R	X	761.5	143.5	4.45	696.5	83.8	2.62	ZZ
9WXLK9	*	698.5	80.5	2.50	691.5	78.8	2.46	ZZ
9YGXX4	*	537.5	-80.5	-2.49	557.5	-55.2	-1.72	ZZ
AHBQLM		629.0	11.0	0.34	617.5	4.8	0.15	ZZ
AZQ2A8		588.0	-30.0	-0.93	554.8	-58.0	-1.81	ZZ
C2G6VD		583.0	-35.0	-1.08	578.0	-34.7	-1.08	ZZ
C4ZYUY		630.0	12.0	0.37	620.0	7.3	0.23	ZZ
C7VKMQ		631.0	13.0	0.40	613.5	0.8	0.02	ZZ
CAT4M4		618.0	0.0	0.00	625.5	12.8	0.40	ZZ
CB2DHL		648.5	30.5	0.95	647.0	34.3	1.07	ZZ
CDQMP2		629.5	11.5	0.36	603.5	-9.2	-0.29	ZZ
CMG78G	*	683.5	65.5	2.03	647.5	34.8	1.09	ZZ
CMUWWJ		623.4	5.5	0.17	627.9	15.1	0.47	ZZ
DGMQWF	X	447.5	-170.5	-5.29	573.3	-39.5	-1.23	ZZ
DMC6HZ		638.5	20.5	0.64	635.0	22.3	0.70	ZZ
DT3FW6		596.0	-22.0	-0.68	589.5	-23.2	-0.73	ZZ
E3KEZF		606.0	-12.0	-0.37	600.0	-12.7	-0.40	ZZ
E4E67U		634.5	16.5	0.51	636.0	23.3	0.73	ZZ
EGGVPD		626.6	8.6	0.27	623.8	11.0	0.35	ZZ
EJ739P		582.3	-35.7	-1.11	567.4	-45.3	-1.41	ZZ
EYK9JN		604.5	-13.5	-0.42	611.0	-1.7	-0.05	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
F6MY47		628.0	10.0	0.31	632.0	19.3	0.60	ZZ
F88QDM		580.5	-37.5	-1.16	584.5	-28.2	-0.88	ZZ
F93AEP		613.4	-4.5	-0.14	609.3	-3.4	-0.11	ZZ
FE96W4		599.0	-19.0	-0.59	608.5	-4.2	-0.13	ZZ
G468NU		598.0	-20.0	-0.62	598.5	-14.2	-0.44	ZZ
G6ZQRG		623.4	5.5	0.17	603.9	-8.8	-0.27	ZZ
GATP7C		624.5	6.5	0.20	613.0	0.3	0.01	ZZ
GBMFCQ		650.0	32.0	0.99	650.0	37.3	1.17	ZZ
GNUNU9		628.1	10.1	0.31	632.6	19.9	0.62	ZZ
GQ693H		593.5	-24.5	-0.76	589.0	-23.7	-0.74	ZZ
HDAE8Z		593.8	-24.2	-0.75	604.8	-8.0	-0.25	ZZ
HUV3B4	*	610.0	-8.0	-0.25	570.0	-42.7	-1.33	ZZ
J6C7XT		596.0	-21.9	-0.68	600.1	-12.6	-0.39	ZZ
J6D49P		593.0	-24.9	-0.77	586.8	-25.9	-0.81	ZZ
JG7KXQ	X	734.5	116.6	3.61	700.4	87.7	2.74	ZZ
K3ZR7D		565.0	-53.0	-1.64	562.0	-50.7	-1.58	ZZ
K4UHBT		629.0	11.0	0.34	620.0	7.3	0.23	ZZ
KCMPUX		631.5	13.5	0.42	602.0	-10.7	-0.33	ZZ
KEU64P		588.5	-29.5	-0.91	591.0	-21.7	-0.68	ZZ
KLVJNQ		623.0	5.1	0.16	637.0	24.3	0.76	ZZ
KPUXCF		635.0	17.0	0.53	648.0	35.3	1.10	ZZ
KRH8N3		637.5	19.5	0.61	650.5	37.8	1.18	ZZ
LBRN7L		610.5	-7.5	-0.23	612.7	0.0	0.00	ZZ
LDHVNX		625.2	7.2	0.22	635.1	22.4	0.70	ZZ
LHCMXF		610.0	-8.0	-0.25	585.0	-27.7	-0.87	ZZ
LQ7RRG		612.5	-5.5	-0.17	603.8	-9.0	-0.28	ZZ
LXLDYY		613.1	-4.9	-0.15	620.3	7.6	0.24	ZZ
M2K9YD		597.4	-20.5	-0.64	590.1	-22.6	-0.71	ZZ
M3EWFN		610.8	-7.2	-0.22	626.1	13.3	0.42	ZZ
MQJL8G		631.0	13.0	0.40	622.5	9.8	0.31	ZZ
MWMRM		643.5	25.5	0.79	656.0	43.3	1.35	ZZ
NAT3RK	X	641.5	23.5	0.73	678.0	65.3	2.04	ZZ
NLLL9C		587.0	-31.0	-0.96	553.5	-59.2	-1.85	ZZ
NLYBA3		635.5	17.5	0.54	628.1	15.3	0.48	ZZ
NMFDEQ		575.0	-43.0	-1.33	585.5	-27.2	-0.85	ZZ
P73DMX		592.5	-25.5	-0.79	575.0	-37.7	-1.18	ZZ
PMC6MH		549.0	-69.0	-2.14	560.5	-52.2	-1.63	ZZ
PN39FP		585.1	-32.9	-1.02	580.3	-32.4	-1.01	ZZ
QPVJT4		612.5	-5.5	-0.17	608.0	-4.7	-0.15	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
QVNLW4		642.0	24.0	0.75	630.0	17.3	0.54	ZZ
QXPLWZ		565.0	-53.0	-1.64	569.5	-43.2	-1.35	ZZ
RADB66		605.5	-12.5	-0.39	590.0	-22.7	-0.71	ZZ
RDDJAF		645.5	27.5	0.85	647.5	34.8	1.09	ZZ
TFYKUU		583.0	-35.0	-1.08	565.0	-47.7	-1.49	ZZ
TJV99F		618.5	0.5	0.02	620.0	7.3	0.23	ZZ
TT92ZY		600.0	-18.0	-0.56	610.0	-2.7	-0.08	ZZ
TVX8JA		600.0	-18.0	-0.56	600.0	-12.7	-0.40	ZZ
TX33ZR		609.7	-8.3	-0.26	609.2	-3.6	-0.11	ZZ
UA8FWJ		613.5	-4.5	-0.14	596.5	-16.2	-0.51	ZZ
UUDB72	X	516.5	-101.5	-3.15	555.5	-57.2	-1.79	ZZ
UXW8UR		628.0	10.0	0.31	622.0	9.3	0.29	ZZ
VBHYXR		590.0	-28.0	-0.87	590.0	-22.7	-0.71	ZZ
VEXCYE		656.0	38.0	1.18	659.0	46.3	1.45	ZZ
VFRV32	*	564.0	-54.0	-1.67	591.5	-21.2	-0.66	ZZ
VGMJGQ		606.0	-12.0	-0.37	613.0	0.3	0.01	ZZ
VHWQJJ		691.5	73.5	2.28	673.0	60.3	1.88	ZZ
W4UENK	*	605.0	-13.0	-0.40	561.0	-51.7	-1.62	ZZ
WJQVDH		581.0	-37.0	-1.15	587.5	-25.2	-0.79	ZZ
X3G4BD		676.5	58.5	1.82	683.5	70.8	2.21	ZZ
X7J3NR		631.0	13.0	0.40	617.0	4.3	0.13	ZZ
XQHQTR		640.5	22.5	0.70	629.5	16.8	0.52	ZZ
Y4PX74		584.0	-34.0	-1.05	562.0	-50.7	-1.58	ZZ
Y7D8HQ		661.0	43.0	1.33	660.0	47.3	1.48	ZZ
YBLQGJ		609.0	-9.0	-0.28	591.0	-21.7	-0.68	ZZ
YGWLKT		606.3	-11.7	-0.36	613.0	0.2	0.01	ZZ
YVR9ME		561.0	-57.0	-1.77	572.5	-40.2	-1.26	ZZ
ZA8QWU	*	630.0	12.0	0.37	582.5	-30.2	-0.94	ZZ
ZDQLVF		561.0	-57.0	-1.77	544.5	-68.2	-2.13	ZZ
ZHKFV3		633.1	15.1	0.47	633.7	21.0	0.66	ZZ
ZHZWRF	*	706.0	88.0	2.73	679.2	66.5	2.08	ZZ

Summary Statistics

	Sample B51	Sample B52
Grand Means	617.96 percent	612.71 percent
Stnd Dev Btwn Labs	32.25 percent	32.00 percent

Statistics based on 104 of 109 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Comments on assigned Data Flags for Test #606

9JRP3R (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are high. Inconsistency in testing within Sample group B51-B52.

DGMQWE (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are low. Data appear to be transposed between Analysis #606 and Analysis #607. Data switched by CTS.

JG7KXQ (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are high.

NAT3RK (X) - Inconsistency in testing between Sample groups.

UUDB72 (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are low.

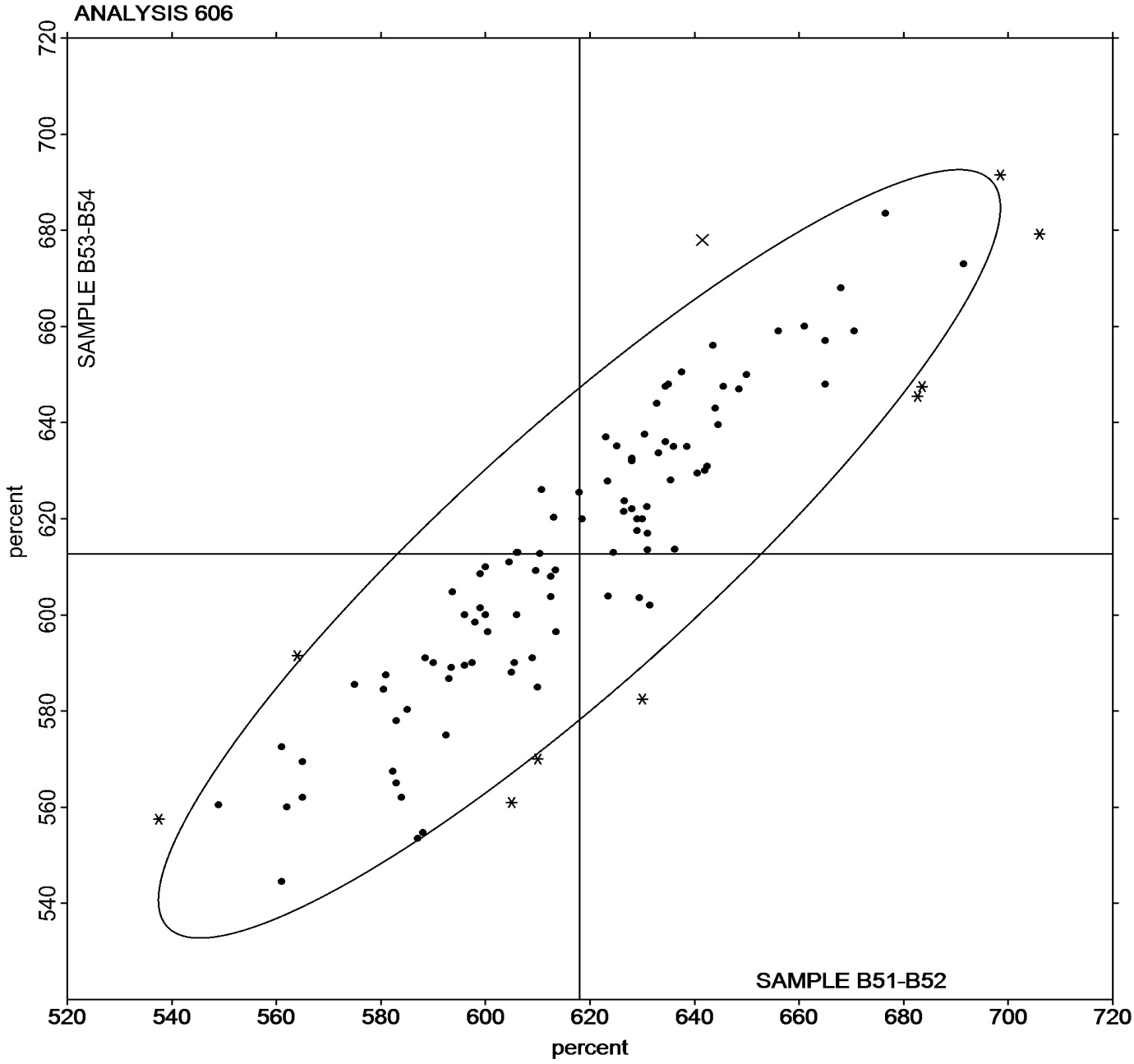
Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample **B51** = 617.96 percent

Grand Mean Sample **B52** = 612.71 percent



Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
2Q9T88		994.5	-39.7	-0.44	963.5	-79.2	-0.92	ZZ
34FZM4		983.5	-50.7	-0.56	969.0	-73.7	-0.86	ZZ
3LFB9L		898.0	-136.2	-1.50	986.5	-56.2	-0.65	ZZ
3Y2P9E		1,124.5	90.3	1.00	1,146.0	103.3	1.20	ZZ
46MXAK		1,052.5	18.3	0.20	1,007.0	-35.7	-0.42	ZZ
4RFPUM		937.0	-97.2	-1.07	901.5	-141.2	-1.65	ZZ
63WTGD		1,018.0	-16.2	-0.18	1,026.0	-16.7	-0.19	ZZ
6BNCTZ		1,126.0	91.8	1.01	1,102.5	59.8	0.70	ZZ
6CHYAB		1,056.0	21.8	0.24	1,096.5	53.8	0.63	ZZ
6W7LRC		1,008.0	-26.2	-0.29	1,052.0	9.3	0.11	ZZ
76VVFD		958.0	-76.3	-0.84	1,018.2	-24.5	-0.29	ZZ
7MFKQT		983.4	-50.9	-0.56	987.2	-55.4	-0.65	ZZ
7P6QA6		1,023.0	-11.2	-0.12	1,007.5	-35.2	-0.41	ZZ
8EGCMD		988.0	-46.2	-0.51	986.5	-56.2	-0.65	ZZ
8TX83A		1,040.3	6.1	0.07	1,106.5	63.8	0.74	ZZ
94BULA		1,046.1	11.8	0.13	1,030.4	-12.3	-0.14	ZZ
9EU4CN	X	723.7	-310.6	-3.43	763.5	-279.2	-3.25	ZZ
9JRP3R	X	799.0	-235.2	-2.60	754.0	-288.7	-3.36	ZZ
9WXLK9	*	808.0	-226.2	-2.50	859.0	-183.7	-2.14	ZZ
9YGXX4		1,184.2	150.0	1.66	1,178.4	135.8	1.58	ZZ
AHBQLM		1,112.5	78.3	0.86	1,133.5	90.8	1.06	ZZ
AZQ2A8	*	1,115.0	80.8	0.89	1,225.0	182.3	2.13	ZZ
C2G6VD		1,171.5	137.3	1.52	1,154.0	111.3	1.30	ZZ
C4ZYUY		949.5	-84.7	-0.94	1,010.0	-32.7	-0.38	ZZ
C7VKMQ		916.5	-117.7	-1.30	1,020.0	-22.7	-0.26	ZZ
CAT4M4		1,119.5	85.3	0.94	1,085.0	42.3	0.49	ZZ
CB2DHL		878.0	-156.2	-1.73	915.5	-127.2	-1.48	ZZ
CDQMP2		967.4	-66.8	-0.74	1,042.8	0.2	0.00	ZZ
CMG78G		1,033.5	-0.7	-0.01	1,087.0	44.3	0.52	ZZ
CMUWW		1,054.0	19.7	0.22	1,090.9	48.2	0.56	ZZ
DGMQWF	X	1,061.3	27.0	0.30	1,008.3	-34.4	-0.40	ZZ
DMC6HZ		952.9	-81.3	-0.90	975.4	-67.3	-0.78	ZZ
DT3FW6		1,097.0	62.8	0.69	1,095.5	52.8	0.62	ZZ
E3KEZF		1,023.5	-10.7	-0.12	1,054.5	11.8	0.14	ZZ
E4E67U		1,005.0	-29.2	-0.32	965.0	-77.7	-0.91	ZZ
EGGVPD		1,125.5	91.3	1.01	1,096.5	53.8	0.63	ZZ
EJ739P		1,137.1	102.9	1.14	1,216.9	174.2	2.03	ZZ
EYK9JN		1,081.4	47.2	0.52	1,033.6	-9.1	-0.11	ZZ
F6MY47		993.5	-40.7	-0.45	993.5	-49.1	-0.57	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
F88QDM		1,103.4	69.2	0.76	1,061.0	18.3	0.21	ZZ
F93AEP		1,047.4	13.2	0.15	1,035.7	-7.0	-0.08	ZZ
FE96W4		1,045.0	10.8	0.12	991.0	-51.7	-0.60	ZZ
G468NU		1,067.5	33.3	0.37	1,037.5	-5.2	-0.06	ZZ
G6ZQRG		996.8	-37.5	-0.41	1,030.0	-12.7	-0.15	ZZ
GATP7C		935.5	-98.7	-1.09	977.5	-65.2	-0.76	ZZ
GNUNU9		1,106.4	72.1	0.80	1,083.9	41.2	0.48	ZZ
GQ693H		1,129.9	95.6	1.06	1,098.7	56.0	0.65	ZZ
HDAE8Z		1,027.0	-7.2	-0.08	997.0	-45.7	-0.53	ZZ
HUV3B4		948.0	-86.2	-0.95	1,042.5	-0.2	0.00	ZZ
J6C7XT		1,111.7	77.5	0.86	1,127.0	84.3	0.98	ZZ
J6D49P		1,042.9	8.6	0.09	1,076.4	33.7	0.39	ZZ
JG7KXQ	X	695.2	-339.1	-3.74	754.0	-288.7	-3.36	ZZ
K3ZR7D		1,009.5	-24.7	-0.27	1,043.5	0.8	0.01	ZZ
K4UHBT		952.3	-82.0	-0.91	970.2	-72.5	-0.84	ZZ
KCMPUX		952.5	-81.7	-0.90	1,022.5	-20.2	-0.23	ZZ
KEU64P		1,020.3	-13.9	-0.15	1,038.5	-4.2	-0.05	ZZ
KLVJNQ		1,065.3	31.0	0.34	1,045.2	2.5	0.03	ZZ
KPUXCF	*	1,000.8	-33.5	-0.37	899.2	-143.4	-1.67	ZZ
KRH8N3		942.5	-91.7	-1.01	927.5	-115.2	-1.34	ZZ
LBRN7L		995.3	-39.0	-0.43	1,025.7	-17.0	-0.20	ZZ
LDHVNX		1,100.5	66.3	0.73	1,056.0	13.3	0.16	ZZ
LHCMXF		1,035.0	0.8	0.01	1,103.0	60.3	0.70	ZZ
LXLDYY		1,114.9	80.6	0.89	1,096.8	54.2	0.63	ZZ
M2K9YD		1,044.2	10.0	0.11	1,002.0	-40.7	-0.47	ZZ
M3EWFN		987.3	-47.0	-0.52	969.9	-72.8	-0.85	ZZ
MQJL8G		1,034.3	0.0	0.00	1,011.9	-30.8	-0.36	ZZ
MWMRM	*	811.0	-223.2	-2.47	914.5	-128.2	-1.49	ZZ
NAT3RK		900.0	-134.2	-1.48	904.0	-138.7	-1.62	ZZ
NLLL9C	X	1,432.0	397.8	4.39	1,515.0	472.3	5.51	ZZ
NLYBA3		1,037.6	3.4	0.04	1,046.5	3.8	0.04	ZZ
NMFDEQ		1,112.5	78.3	0.86	1,072.5	29.8	0.35	ZZ
P73DMX		1,089.2	55.0	0.61	1,100.1	57.5	0.67	ZZ
PMC6MH	*	1,273.0	238.8	2.64	1,277.5	234.8	2.74	ZZ
PN39FP		1,176.3	142.0	1.57	1,202.4	159.7	1.86	ZZ
QPVJT4		1,036.3	2.1	0.02	1,041.4	-1.3	-0.01	ZZ
QVNLW4		954.4	-79.9	-0.88	995.0	-47.7	-0.56	ZZ
QXPLWZ	*	1,296.5	262.3	2.90	1,278.5	235.8	2.75	ZZ
RADB66		1,068.0	33.8	0.37	1,095.0	52.3	0.61	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
RDDJAF		981.0	-53.2	-0.59	898.0	-144.7	-1.69	ZZ
TFYKUU		1,050.0	15.8	0.17	1,092.5	49.8	0.58	ZZ
TJV99F		1,067.5	33.3	0.37	1,048.5	5.8	0.07	ZZ
TT92ZY		1,053.7	19.5	0.21	1,041.4	-1.3	-0.01	ZZ
TVX8JA		1,167.5	133.3	1.47	1,162.5	119.8	1.40	ZZ
TX33ZR		1,053.7	19.5	0.22	1,063.4	20.7	0.24	ZZ
UA8FWJ		1,018.5	-15.7	-0.17	1,059.0	16.3	0.19	ZZ
UUDB72		1,094.0	59.8	0.66	1,000.5	-42.2	-0.49	ZZ
UXW8UR		1,052.0	17.8	0.20	1,045.0	2.3	0.03	ZZ
VBHYXR		973.0	-61.2	-0.68	1,023.5	-19.2	-0.22	ZZ
VEXCYE		933.5	-100.7	-1.11	926.0	-116.7	-1.36	ZZ
VFRV32		1,203.0	168.8	1.86	1,138.0	95.3	1.11	ZZ
VGMJGQ		1,123.5	89.3	0.99	1,085.0	42.3	0.49	ZZ
VHWQJJ		845.0	-189.2	-2.09	837.5	-205.2	-2.39	ZZ
W4UENK	X	1,025.0	-9.2	-0.10	1,205.0	162.3	1.89	ZZ
WJQVDH		1,190.0	155.8	1.72	1,141.0	98.3	1.15	ZZ
X3G4BD		896.0	-138.2	-1.53	888.0	-154.7	-1.80	ZZ
X7J3NR		1,090.0	55.8	0.62	1,106.0	63.3	0.74	ZZ
XQHQTR		1,010.5	-23.7	-0.26	1,024.0	-18.7	-0.22	ZZ
Y4PX74		1,089.8	55.5	0.61	1,175.6	132.9	1.55	ZZ
Y7D8HQ		928.5	-105.7	-1.17	966.5	-76.2	-0.89	ZZ
YBLQGJ		959.0	-75.2	-0.83	1,059.0	16.3	0.19	ZZ
YGWLKT		1,085.9	51.7	0.57	1,067.9	25.2	0.29	ZZ
YVR9ME		1,143.5	109.3	1.21	1,170.5	127.8	1.49	ZZ
ZA8QWU		978.0	-56.2	-0.62	1,016.5	-26.2	-0.30	ZZ
ZDQLVF	X	1,265.0	230.8	2.55	1,360.0	317.3	3.70	ZZ
ZHKFV3		1,015.3	-19.0	-0.21	1,002.2	-40.4	-0.47	ZZ
ZHZWRF		855.2	-179.1	-1.98	869.7	-173.0	-2.02	ZZ

Summary Statistics

	Sample B51	Sample B52
Grand Means	1,034.25 psi	1,042.66 psi
Stnd Dev Btwn Labs	90.56 psi	85.80 psi

Statistics based on 99 of 106 reporting participants

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Summary Statistics in SI Units

Grand Means	7.1308 MPa	7.19 MPa
Stnd Dev Btwn Labs	0.6244 MPa	0.59 MPa

Statistics based on 99 of 106 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #607

9EU4CN (X) - Data for all Samples are low. Possible systematic error.

9JRP3R (X) - Inconsistency in testing between Sample groups. Data for Sample group B53-B54 are low.

DGMQWE (X) - Data appear to be transposed between Analysis #607 and Analysis #606. Data switched by CTS.

JG7KXQ (X) - Data for all Samples are low. Possible systematic error.

NLLL9C (X) - Data for all Samples are high. Possible systematic error.

W4UENK (X) - Inconsistency in testing between Sample groups.

ZDQLVF (X) - Inconsistency in testing between Sample groups. Data for Sample group B53-B54 are high.

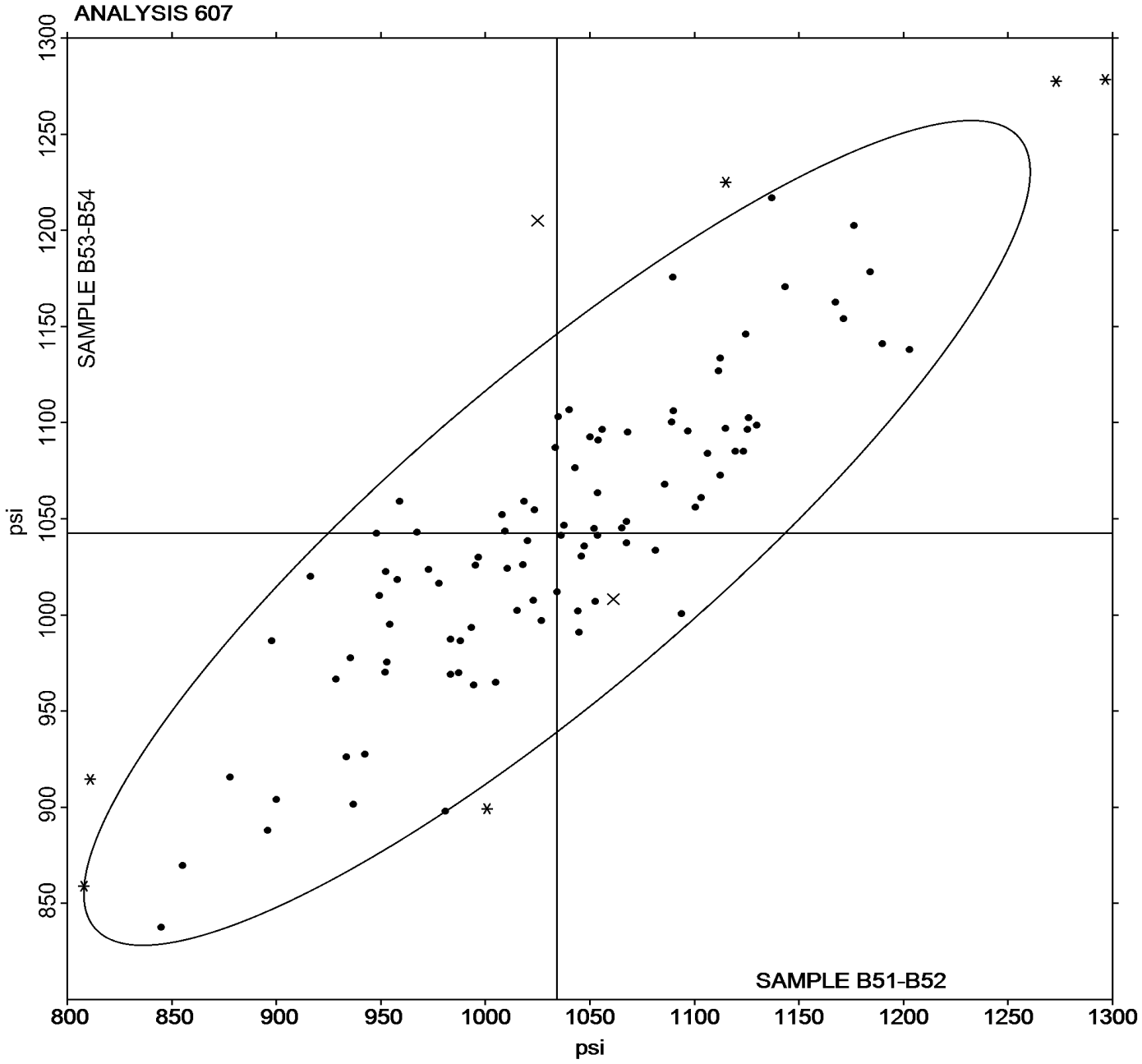
Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample **B51** = 1,034.25 psi

Grand Mean Sample **B52** = 1,042.66 psi



Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
2Q9T88		206.5	-9.5	-0.66	206.0	-12.8	-0.97	ZZ
34FZM4		215.5	-0.5	-0.04	212.0	-6.8	-0.52	ZZ
3LFB9L		191.0	-25.0	-1.74	204.5	-14.3	-1.08	ZZ
3Y2P9E		229.0	13.0	0.90	234.0	15.2	1.15	ZZ
46MXAK		217.0	1.0	0.07	209.5	-9.3	-0.71	ZZ
4RFPUM		211.0	-5.0	-0.35	208.5	-10.3	-0.78	ZZ
63WTGD	X	279.0	63.0	4.37	283.5	64.7	4.90	ZZ
6BNCTZ		229.0	13.0	0.90	224.5	5.7	0.43	ZZ
6CHYAB		218.0	2.0	0.14	223.5	4.7	0.35	ZZ
6W7LRC		199.5	-16.5	-1.15	208.5	-10.3	-0.78	ZZ
76VVFD		201.6	-14.4	-1.00	207.4	-11.4	-0.86	ZZ
7MFKQT		204.3	-11.7	-0.82	208.8	-10.1	-0.76	ZZ
7P6QA6		213.0	-3.0	-0.21	210.5	-8.3	-0.63	ZZ
8EGCMD		219.0	3.0	0.20	225.0	6.2	0.47	ZZ
8TX83A		220.1	4.1	0.28	229.2	10.4	0.79	ZZ
94BULA		215.2	-0.8	-0.06	212.4	-6.4	-0.49	ZZ
9EU4CN	X	157.9	-58.1	-4.04	243.6	24.8	1.88	ZZ
9JRP3R	X	167.5	-48.5	-3.37	161.5	-57.3	-4.34	ZZ
9WXLK9		193.5	-22.5	-1.57	204.5	-14.3	-1.08	ZZ
9YGXX4		246.6	30.5	2.12	244.4	25.6	1.94	ZZ
AHBQLM	X	329.0	113.0	7.84	330.0	111.2	8.42	ZZ
AZQ2A8		210.5	-5.5	-0.39	217.5	-1.3	-0.10	ZZ
C2G6VD		229.0	13.0	0.90	226.0	7.2	0.54	ZZ
C4ZYUY		204.0	-12.0	-0.84	212.0	-6.8	-0.52	ZZ
C7VKMQ		200.0	-16.0	-1.11	213.5	-5.3	-0.40	ZZ
CAT4M4		242.0	26.0	1.80	228.5	9.7	0.73	ZZ
CB2DHL		203.5	-12.5	-0.87	206.5	-12.3	-0.93	ZZ
CDQMP2	*	196.5	-19.5	-1.36	221.9	3.1	0.23	ZZ
CMG78G	X	274.8	58.8	4.08	287.9	69.1	5.23	ZZ
CMUWWJ		229.9	13.9	0.96	238.4	19.6	1.48	ZZ
DGMQWH	X	145.3	-70.8	-4.92	176.3	-42.6	-3.22	ZZ
DMC6HZ		201.6	-14.4	-1.00	204.5	-14.3	-1.08	ZZ
DT3FW6		228.5	12.5	0.86	237.5	18.7	1.42	ZZ
E3KEZF		220.5	4.5	0.31	219.5	0.7	0.05	ZZ
E4E67U		211.0	-5.0	-0.35	207.5	-11.3	-0.86	ZZ
EGGVPD		226.3	10.2	0.71	224.8	6.0	0.45	ZZ
EJ739P	X	237.6	21.6	1.50	265.8	47.0	3.56	ZZ
EYK9JN		225.0	9.0	0.62	214.5	-4.3	-0.33	ZZ
F6MY47		203.1	-13.0	-0.90	210.3	-8.5	-0.64	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
F88QDM		230.5	14.5	1.00	228.8	9.9	0.75	ZZ
F93AEP		215.9	-0.2	-0.01	218.1	-0.8	-0.06	ZZ
FE96W4		214.0	-2.0	-0.14	204.0	-14.8	-1.12	ZZ
G468NU		216.0	0.0	0.00	216.5	-2.3	-0.18	ZZ
G6ZQRG		231.2	15.1	1.05	239.0	20.1	1.52	ZZ
GATP7C		243.5	27.5	1.91	251.5	32.7	2.48	ZZ
GNUNU9		234.0	18.0	1.25	230.3	11.5	0.87	ZZ
GQ693H		242.2	26.2	1.82	239.3	20.5	1.55	ZZ
HDAE8Z		206.5	-9.5	-0.66	198.5	-20.3	-1.54	ZZ
HUV3B4		211.0	-5.0	-0.35	225.5	6.7	0.51	ZZ
J6C7XT		228.4	12.4	0.86	239.3	20.5	1.55	ZZ
J6D49P		215.6	-0.4	-0.03	221.2	2.4	0.18	ZZ
JG7KXQ	*	177.0	-39.1	-2.71	186.4	-32.4	-2.45	ZZ
K3ZR7D		205.5	-10.5	-0.73	215.5	-3.3	-0.25	ZZ
K4UHBT		202.2	-13.9	-0.96	209.7	-9.1	-0.69	ZZ
KCMPUX		201.5	-14.5	-1.01	214.0	-4.8	-0.36	ZZ
KEU64P		214.7	-1.4	-0.10	217.6	-1.3	-0.09	ZZ
KLVJNQ		221.6	5.5	0.38	218.7	-0.2	-0.01	ZZ
KPUXCF	X	203.1	-13.0	-0.90	181.3	-37.5	-2.84	ZZ
KRH8N3		211.0	-5.0	-0.35	216.0	-2.8	-0.21	ZZ
LBRN7L		201.9	-14.1	-0.98	211.6	-7.3	-0.55	ZZ
LDHVNX		244.5	28.5	1.98	240.5	21.7	1.64	ZZ
LHCMXF		212.5	-3.5	-0.25	222.0	3.2	0.24	ZZ
LQ7RRG		212.3	-3.8	-0.26	218.5	-0.3	-0.02	ZZ
LXLDYY		218.4	2.4	0.16	216.2	-2.6	-0.20	ZZ
M2K9YD		209.4	-6.7	-0.46	204.0	-14.8	-1.12	ZZ
M3EWFN		210.2	-5.8	-0.40	211.2	-7.6	-0.57	ZZ
MQJL8G		216.4	0.4	0.02	216.6	-2.2	-0.17	ZZ
MWMRM		197.5	-18.5	-1.29	216.5	-2.3	-0.18	ZZ
NAT3RK		200.0	-16.0	-1.11	204.5	-14.3	-1.08	ZZ
NLLL9C	X	292.5	76.5	5.31	315.0	96.2	7.28	ZZ
NLYBA3		240.5	24.5	1.70	232.3	13.4	1.02	ZZ
NMFDEQ		214.5	-1.5	-0.11	207.5	-11.3	-0.86	ZZ
P73DMX		225.5	9.5	0.66	231.3	12.5	0.95	ZZ
PMC6MH	*	245.0	29.0	2.01	256.5	37.7	2.85	ZZ
PN39FP		231.3	15.3	1.06	237.1	18.3	1.39	ZZ
QPVJT4		219.0	3.0	0.21	219.0	0.2	0.01	ZZ
QVNLW4		201.6	-14.4	-1.00	208.1	-10.7	-0.81	ZZ
QXPLWZ		234.5	18.5	1.28	247.0	28.2	2.13	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
RADB66		219.0	3.0	0.20	219.0	0.2	0.01	ZZ
RDDJAF		215.0	-1.0	-0.07	200.5	-18.3	-1.39	ZZ
TFYKUU		209.5	-6.5	-0.45	219.0	0.2	0.01	ZZ
TJV99F		222.5	6.5	0.45	222.0	3.2	0.24	ZZ
TT92ZY		229.2	13.1	0.91	223.4	4.5	0.34	ZZ
TVX8JA		250.5	34.5	2.39	248.5	29.7	2.25	ZZ
TX33ZR		215.8	-0.2	-0.02	216.3	-2.5	-0.19	ZZ
UA8FWJ		203.5	-12.5	-0.87	215.0	-3.8	-0.29	ZZ
UUDB72		216.0	0.0	0.00	205.5	-13.3	-1.01	ZZ
UXW8UR		222.0	6.0	0.41	220.5	1.7	0.13	ZZ
VBHYXR		216.5	0.5	0.03	210.0	-8.8	-0.67	ZZ
VEXCYE		203.0	-13.0	-0.91	204.5	-14.3	-1.08	ZZ
VFRV32		232.5	16.5	1.14	221.0	2.2	0.17	ZZ
VGMJGQ		233.5	17.5	1.21	222.0	3.2	0.24	ZZ
VHWQJJ		206.0	-10.0	-0.70	207.5	-11.3	-0.86	ZZ
W4UENK		200.0	-16.0	-1.11	212.0	-6.8	-0.52	ZZ
WJQVDH		234.5	18.5	1.28	222.5	3.7	0.28	ZZ
X3G4BD		196.0	-20.0	-1.39	196.5	-22.3	-1.69	ZZ
X7J3NR		230.5	14.5	1.00	235.0	16.2	1.23	ZZ
XQHQTR		209.5	-6.5	-0.45	216.0	-2.8	-0.21	ZZ
Y4PX74	*	221.3	5.2	0.36	241.1	22.2	1.68	ZZ
Y7D8HQ		195.5	-20.5	-1.43	200.5	-18.3	-1.39	ZZ
YBLQGJ	*	191.0	-25.0	-1.74	212.5	-6.3	-0.48	ZZ
YGWLKT		221.9	5.9	0.41	226.8	8.0	0.60	ZZ
YVR9ME		227.0	11.0	0.76	234.0	15.2	1.15	ZZ
ZA8QWU		211.0	-5.0	-0.35	216.5	-2.3	-0.18	ZZ
ZDQLVF	X	318.0	102.0	7.08	338.5	119.7	9.06	ZZ
ZHKFV3		204.5	-11.5	-0.80	207.4	-11.4	-0.86	ZZ
ZHZWRF		201.4	-14.7	-1.02	203.2	-15.7	-1.19	ZZ

Summary Statistics

	Sample B51	Sample B52
Grand Means	216.05 psi	218.81 psi
Stnd Dev Btwn Labs	14.40 psi	13.21 psi

Statistics based on 97 of 107 reporting participants

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Summary Statistics in SI Units

Grand Means	1.4896 MPa	1.51 MPa
Stnd Dev Btwn Labs	0.0993 MPa	0.09 MPa

Statistics based on 97 of 107 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #608

63WTGD (X) - Data for all Samples are high. Possible systematic error.

9EU4CN (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are low. Inconsistency in testing within both Sample groups.

9JRP3R (X) - Data for all Samples are low. Possible systematic error.

AHBQLM (X) - Data for all Samples are high. Possible systematic error.

CMG78G (X) - Data for all Samples are high. Possible systematic error.

DGMQWE (X) - Data for all Samples are low. Possible systematic error.

EJ739P (X) - Inconsistency in testing between Sample groups. Data for Sample group B53-B54 are high.

KPUXCF (X) - Inconsistency in testing between Sample groups.

NLLL9C (X) - Data for all Samples are high. Possible systematic error.

ZDQLVF (X) - Extreme data.

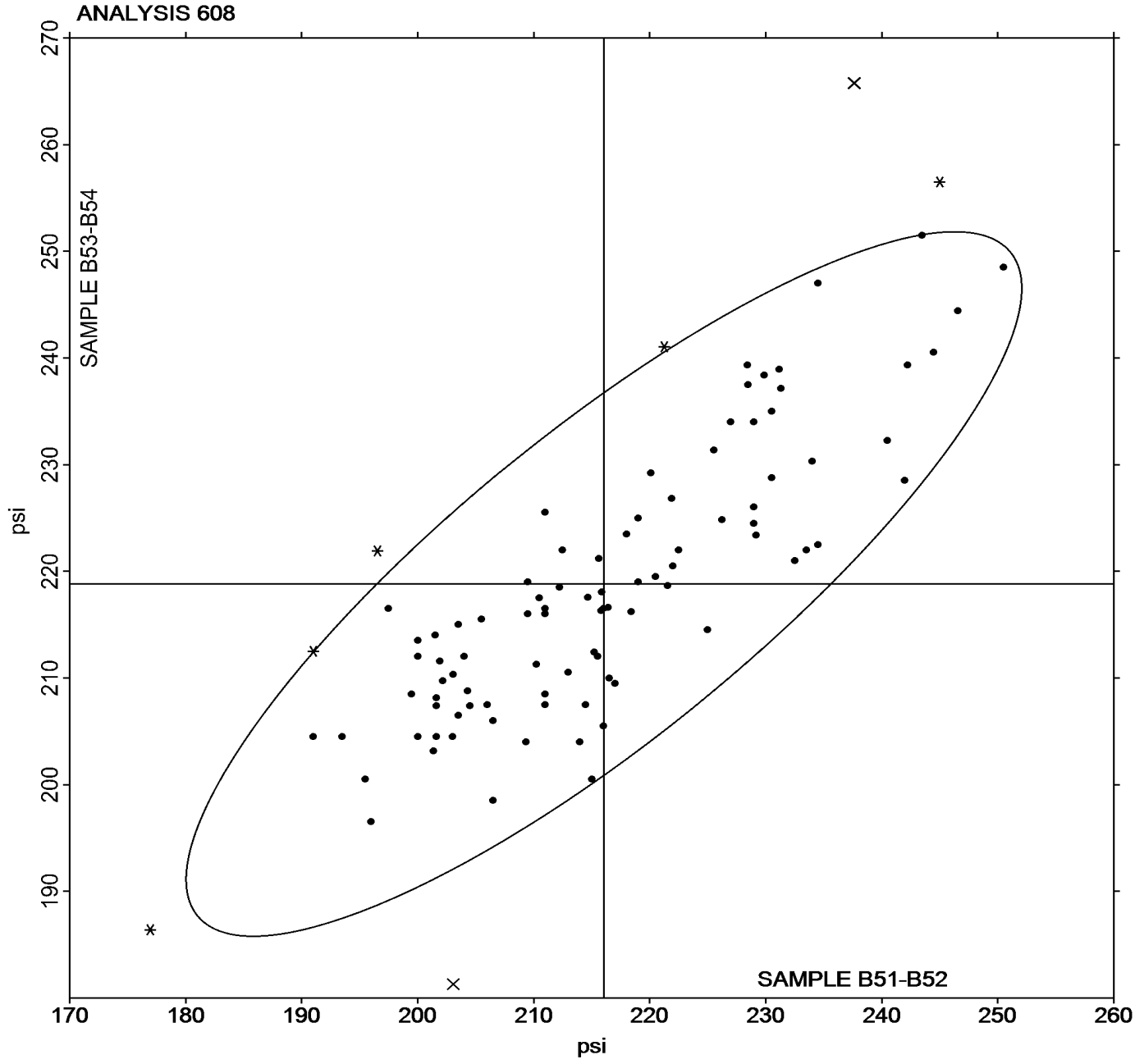
Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample **B51** = 216.05 psi

Grand Mean Sample **B52** = 218.81 psi



Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
2Q9T88		52.60	2.25	1.80	52.50	1.77	1.37	BT
34FZM4		49.00	-1.35	-1.08	49.50	-1.23	-0.95	BT
3A4LT6		52.50	2.15	1.72	53.00	2.27	1.76	HH
3LFB9L		50.00	-0.35	-0.28	50.00	-0.73	-0.56	XX
3Y2P9E		50.80	0.45	0.36	51.50	0.77	0.60	BT
46MXAK		50.50	0.15	0.12	51.00	0.27	0.21	XX
4RFPUM		49.40	-0.95	-0.76	50.25	-0.48	-0.37	BT
63WTGD		49.00	-1.35	-1.08	49.00	-1.73	-1.34	BT
6BNCTZ		50.05	-0.30	-0.24	50.30	-0.43	-0.33	BT
6CHYAB		48.90	-1.45	-1.16	48.90	-1.83	-1.42	BT
6W7LRC		51.25	0.90	0.72	51.50	0.77	0.60	XX
76VVFD		49.55	-0.80	-0.64	49.90	-0.83	-0.64	BT
7MFKQT		49.60	-0.75	-0.60	50.40	-0.33	-0.25	BT
7P6QA6		50.05	-0.30	-0.24	51.30	0.57	0.44	BT
8EGCMD		49.05	-1.30	-1.04	50.55	-0.18	-0.14	XX
8TX83A		50.50	0.15	0.12	50.05	-0.68	-0.53	BT
94BULA		51.65	1.30	1.04	52.10	1.37	1.06	BT
9EU4CN		49.00	-1.35	-1.08	49.50	-1.23	-0.95	XX
9JRP3R		48.75	-1.60	-1.28	48.40	-2.33	-1.80	BT
9WXLK9		50.50	0.15	0.12	50.00	-0.73	-0.56	HH
9YGXX4		50.65	0.30	0.24	51.05	0.32	0.25	BT
A3FBJ9		48.65	-1.70	-1.36	49.30	-1.43	-1.11	BT
AHBQLM		49.00	-1.35	-1.08	50.00	-0.73	-0.56	BT
AZQ2A8		50.00	-0.35	-0.28	50.00	-0.73	-0.56	HH
C2G6VD		50.50	0.15	0.12	50.50	-0.23	-0.18	HH
C4ZYUY		51.50	1.15	0.92	52.00	1.27	0.99	HH
C7VKMQ		48.35	-2.00	-1.60	48.85	-1.88	-1.46	BT
C9YDGN		47.50	-2.85	-2.28	48.50	-2.23	-1.73	BT
CAT4M4		50.50	0.15	0.12	50.50	-0.23	-0.18	HH
CB2DHL		50.50	0.15	0.12	50.50	-0.23	-0.18	HH
CDQMP2	*	54.10	3.75	3.00	54.05	3.32	2.58	BT
CMG78G		51.50	1.15	0.92	51.55	0.82	0.64	BT
CMUWWJ		51.00	0.65	0.52	51.00	0.27	0.21	XX
DGMQWH	*	49.50	-0.85	-0.68	51.50	0.77	0.60	BT
DMC6HZ		51.00	0.65	0.52	51.50	0.77	0.60	BT
DT3FW6		51.60	1.25	1.00	52.20	1.47	1.14	XX
E3KEZF		51.15	0.80	0.64	51.10	0.37	0.29	XX
E4E67U		50.50	0.15	0.12	50.50	-0.23	-0.18	BT
EGGVPD	X	50.40	0.05	0.04	47.75	-2.98	-2.31	XX

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
EJ739P		50.00	-0.35	-0.28	51.00	0.27	0.21	HH
EYK9JN	X	48.50	-1.85	-1.48	46.50	-4.23	-3.28	XX
F6MY47		50.85	0.50	0.40	50.80	0.07	0.06	XX
F93AEP		51.30	0.95	0.76	52.05	1.32	1.02	BT
FE96W4		51.00	0.65	0.52	51.00	0.27	0.21	XX
G468NU		52.00	1.65	1.32	52.50	1.77	1.37	HH
G6ZQRG		52.50	2.15	1.72	52.75	2.02	1.57	HH
GATP7C		50.50	0.15	0.12	51.25	0.52	0.40	HH
GBMFCQ		51.00	0.65	0.52	51.00	0.27	0.21	XX
GNUNU9	*	47.50	-2.85	-2.28	47.00	-3.73	-2.89	BT
GQ693H		51.95	1.60	1.28	51.35	0.62	0.48	BT
HDAE8Z		49.50	-0.85	-0.68	49.00	-1.73	-1.34	BT
HUV3B4		49.65	-0.70	-0.56	51.15	0.42	0.33	BT
J69JKL		51.00	0.65	0.52	51.50	0.77	0.60	BT
J6C7XT		50.65	0.30	0.24	51.75	1.02	0.79	BT
J6D49P		49.20	-1.15	-0.92	49.95	-0.78	-0.60	BT
J79MAQ		50.00	-0.35	-0.28	50.00	-0.73	-0.56	BT
JG7KXQ		52.50	2.15	1.72	53.00	2.27	1.76	XX
K3ZR7D		50.50	0.15	0.12	50.50	-0.23	-0.18	HH
K4UHBT		49.00	-1.35	-1.08	50.00	-0.73	-0.56	HH
KCMPUX		50.00	-0.35	-0.28	50.00	-0.73	-0.56	HH
KEU64P		49.50	-0.85	-0.68	49.75	-0.98	-0.76	BT
KLVJNQ		52.00	1.65	1.32	52.50	1.77	1.37	XX
KPUXCF		52.00	1.65	1.32	53.00	2.27	1.76	XX
KRH8N3		50.00	-0.35	-0.28	50.00	-0.73	-0.56	BT
LBRN7L		51.50	1.15	0.92	51.50	0.77	0.60	BT
LDHVNX		52.25	1.90	1.52	53.25	2.52	1.95	BT
LHCMXF		50.00	-0.35	-0.28	51.00	0.27	0.21	BT
LQ7RRG		50.50	0.15	0.12	50.50	-0.23	-0.18	XX
LXLDYY		47.50	-2.85	-2.28	48.25	-2.48	-1.92	BT
M2K9YD		50.50	0.15	0.12	52.00	1.27	0.99	XX
M3EWFN		49.30	-1.05	-0.84	49.55	-1.18	-0.91	XX
MQJL8G		51.15	0.80	0.64	51.05	0.32	0.25	XX
MWMRM		50.00	-0.35	-0.28	50.00	-0.73	-0.56	XX
NA7RTC		52.50	2.15	1.72	53.50	2.77	2.15	BT
NAT3RK		51.00	0.65	0.52	50.00	-0.73	-0.56	BT
NLLL9C		51.00	0.65	0.52	51.50	0.77	0.60	BT
NLYBA3		49.50	-0.85	-0.68	50.50	-0.23	-0.18	BT
NMFDEQ	X	50.50	0.15	0.12	48.50	-2.23	-1.73	BT

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
P73DMX		49.00	-1.35	-1.08	50.00	-0.73	-0.56	HH
PMC6MH		50.50	0.15	0.12	52.00	1.27	0.99	XX
PN39FP	X	54.50	4.15	3.32	55.00	4.27	3.31	XX
QPVJT4		50.50	0.15	0.12	50.50	-0.23	-0.18	BT
QVNLW4		52.50	2.15	1.72	53.00	2.27	1.76	HH
QXPLWZ		51.00	0.65	0.52	52.00	1.27	0.99	HH
RADB66	*	50.50	0.15	0.12	52.50	1.77	1.37	HH
RDDJAF		49.20	-1.15	-0.92	48.50	-2.23	-1.73	BT
TFYKUU		50.00	-0.35	-0.28	50.00	-0.73	-0.56	HH
TJV99F		49.50	-0.85	-0.68	49.45	-1.28	-0.99	BT
TT92ZY		48.25	-2.10	-1.68	47.75	-2.98	-2.31	BT
TVX8JA		51.50	1.15	0.92	50.50	-0.23	-0.18	XX
TW8EL3		48.50	-1.85	-1.48	49.00	-1.73	-1.34	BT
TX33ZR		52.00	1.65	1.32	51.00	0.27	0.21	HH
UA8FWJ		50.00	-0.35	-0.28	51.00	0.27	0.21	HH
UUDB72		50.75	0.40	0.32	51.00	0.27	0.21	BT
UXW8UR		50.00	-0.35	-0.28	50.00	-0.73	-0.56	BT
VBHYXR	X	61.00	10.65	8.53	59.50	8.77	6.80	BT
VEXCYE		50.00	-0.35	-0.28	49.50	-1.23	-0.95	BT
VGMJGQ		49.50	-0.85	-0.68	50.00	-0.73	-0.56	BT
VHWQJJ		50.00	-0.35	-0.28	50.50	-0.23	-0.18	HH
W4UENK		50.00	-0.35	-0.28	50.00	-0.73	-0.56	HH
WJQVDH		51.00	0.65	0.52	50.50	-0.23	-0.18	BT
X3G4BD		48.00	-2.35	-1.88	49.00	-1.73	-1.34	BT
X7J3NR		50.50	0.15	0.12	51.00	0.27	0.21	XX
XQHQTR	*	48.00	-2.35	-1.88	50.00	-0.73	-0.56	XX
Y4PX74		52.00	1.65	1.32	52.00	1.27	0.99	BT
Y7D8HQ		49.50	-0.85	-0.68	50.50	-0.23	-0.18	XX
YBLQGJ		50.00	-0.35	-0.28	50.85	0.12	0.09	BT
YGWLKT		50.00	-0.35	-0.28	50.00	-0.73	-0.56	XX
YVR9ME		53.00	2.65	2.12	53.50	2.77	2.15	HH
ZA8QWU		50.00	-0.35	-0.28	50.50	-0.23	-0.18	BT
ZDQLVF		50.00	-0.35	-0.28	51.00	0.27	0.21	HH
ZHKFV3		50.90	0.55	0.44	51.25	0.52	0.40	BT
ZHZWRF		50.45	0.10	0.08	50.70	-0.03	-0.02	BT

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Summary Statistics

	Sample B51	Sample B52
Grand Means	50.347 Type A	50.728 Type A
Stnd Dev Btwn Labs	1.249 Type A	1.290 Type A

Statistics based on 108 of 113 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

EGGVPD (X) - Inconsistency in testing between Sample groups. Inconsistency in testing within Sample group B53-B54.

EYK9JN (X) - Inconsistency in testing between Sample groups. Inconsistency in testing within Sample group B51-B52.

NMFDEQ (X) - Inconsistency in testing between Sample groups.

PN39FP (X) - Data for all Samples are high. Possible systematic error.

VBHYXR (X) - Data for all Samples are high. Possible systematic error.

Results by Reading Time (as reported by laboratory)

	Sample B51 *Polyisoprene compound, batch #1*			Sample B52 *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
Select from list below	50.48	1.07	0.13	50.79	1.07	0.06	76	80
Readings taken at 5 seconds	49.62	1.18	-0.73	49.94	1.47	-0.79	11	17
Readings taken after 5+ seconds	49.68	1.44	-0.67	50.07	1.16	-0.66	6	6
Select from list below	50.76	1.40	0.41	51.39	1.51	0.66	10	10

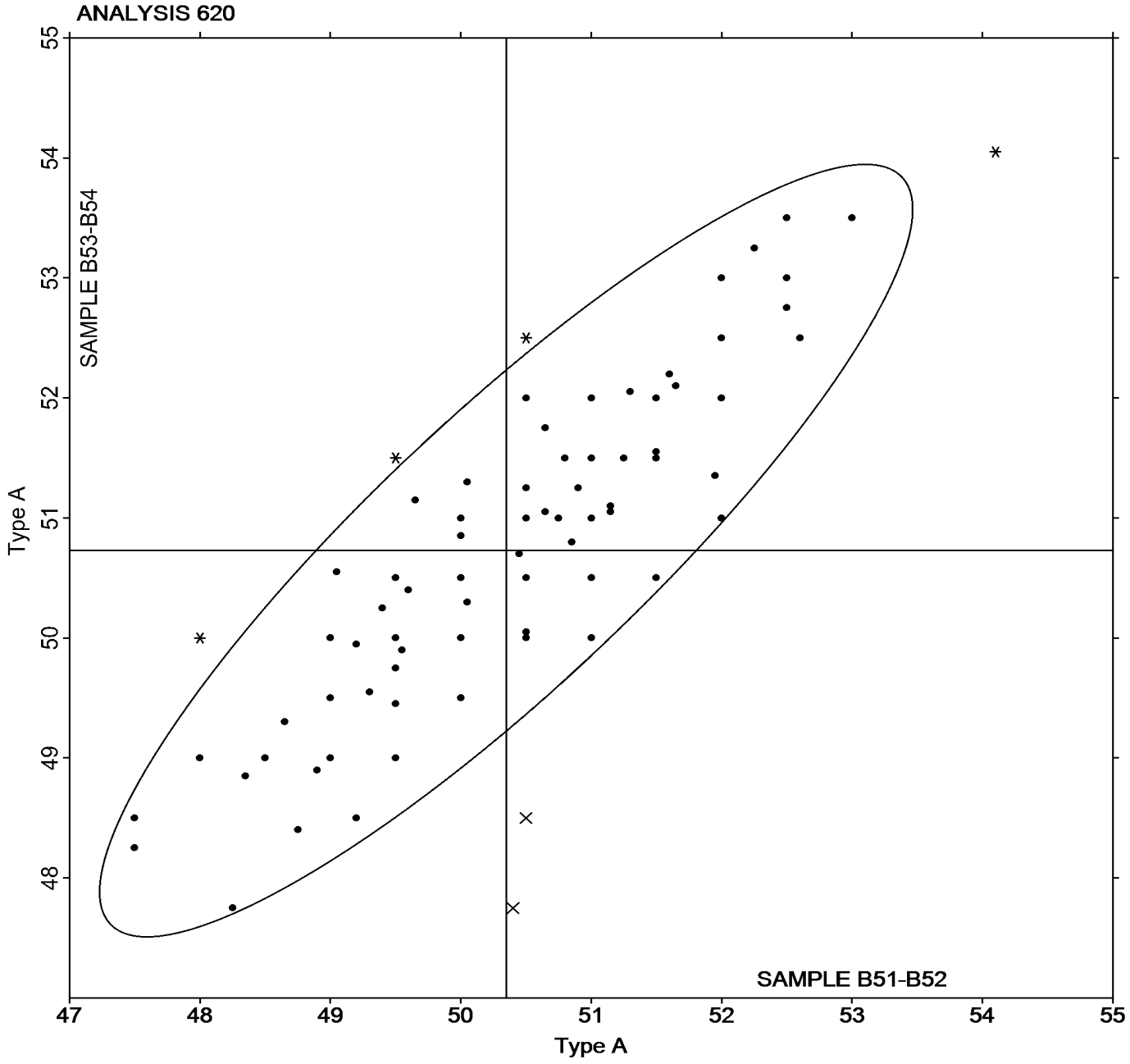
Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample **B51** = 50.347 Type A

Grand Mean Sample **B52** = 50.728 Type A



Rubber Interlaboratory Testing Program

Analysis 621

Density

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
34FZM4		1.137	0.001	0.19	1.137	0.000	0.00	ZZ
3LFB9L		1.137	0.000	0.08	1.138	0.001	0.40	ZZ
3Y2P9E		1.142	0.006	1.92	1.143	0.006	2.10	ZZ
46MXAK		1.137	0.001	0.26	1.138	0.001	0.28	ZZ
4RFPUM	X	1.128	-0.009	-3.05	1.133	-0.004	-1.51	ZZ
63WTGD		1.137	0.000	0.16	1.137	0.000	0.07	ZZ
7MFKQT	*	1.132	-0.004	-1.38	1.130	-0.007	-2.42	ZZ
8TX83A		1.135	-0.002	-0.52	1.137	0.000	-0.11	ZZ
94BULA		1.141	0.004	1.36	1.141	0.004	1.47	ZZ
9YGXX4		1.138	0.001	0.50	1.137	0.000	0.07	ZZ
AHBQLM		1.136	-0.001	-0.18	1.135	-0.002	-0.63	ZZ
C2G6VD		1.135	-0.002	-0.52	1.136	-0.001	-0.46	ZZ
C7VKMQ		1.138	0.002	0.53	1.139	0.002	0.65	ZZ
CDQMP2		1.140	0.003	1.00	1.139	0.002	0.59	ZZ
CMUWWJ	X	1.162	0.025	8.47	1.160	0.024	8.26	ZZ
DGMQWH		1.139	0.003	0.92	1.140	0.003	1.07	ZZ
DT3FW6		1.141	0.004	1.36	1.141	0.004	1.49	ZZ
E3KEZF		1.135	-0.001	-0.45	1.137	0.000	0.16	ZZ
E4E67U		1.136	-0.001	-0.18	1.139	0.002	0.59	ZZ
EGGVPD		1.135	-0.001	-0.43	1.135	-0.002	-0.72	ZZ
EYK9JN		1.132	-0.005	-1.53	1.132	-0.005	-1.86	ZZ
F6MY47		1.138	0.001	0.50	1.139	0.002	0.59	ZZ
F93AEP	*	1.129	-0.008	-2.71	1.130	-0.007	-2.56	ZZ
G468NU		1.139	0.003	0.87	1.139	0.002	0.82	ZZ
G6ZQRG		1.139	0.003	0.94	1.138	0.001	0.37	ZZ
GNUNU9		1.135	-0.002	-0.52	1.134	-0.003	-1.16	ZZ
GQ693H		1.138	0.001	0.35	1.138	0.001	0.40	ZZ
HDAE8Z		1.136	-0.001	-0.18	1.137	0.000	0.07	ZZ
HUV3B4		1.135	-0.002	-0.68	1.136	-0.001	-0.19	ZZ
J69JKL		1.136	0.000	-0.09	1.136	0.000	-0.14	ZZ
J6C7XT		1.138	0.002	0.65	1.140	0.003	0.94	ZZ
J6D49P		1.138	0.001	0.36	1.138	0.001	0.47	ZZ
J79MAQ		1.133	-0.004	-1.34	1.134	-0.003	-0.93	ZZ
JG7KXQ		1.137	0.001	0.24	1.139	0.003	0.93	ZZ
K3ZR7D		1.135	-0.002	-0.52	1.136	-0.001	-0.46	ZZ
K4UHBT	*	1.133	-0.004	-1.34	1.137	0.000	0.07	ZZ
KCMPUX	X	1.140	0.003	1.00	1.140	0.003	0.94	ZZ
KEU64P		1.139	0.002	0.73	1.138	0.001	0.49	ZZ
KRH8N3		1.138	0.002	0.58	1.138	0.001	0.51	ZZ

Rubber Interlaboratory Testing Program

Analysis 621

Density

WebCode	Data Flag	Sample B51 Lab Mean	Sample B51 Diff from Grand Mean	Sample B51 CPV	Sample B52 Lab Mean	Sample B52 Diff from Grand Mean	Sample B52 CPV	Instr Code
LBRN7L		1.135	-0.001	-0.50	1.136	-0.001	-0.42	ZZ
LHCMXF		1.142	0.006	1.87	1.141	0.004	1.29	ZZ
LQ7RRG		1.141	0.004	1.51	1.140	0.003	0.94	ZZ
M2K9YD		1.141	0.004	1.36	1.141	0.004	1.45	ZZ
MWMRM	X	175.082	173.945	58,733.52	253.845	252.708	88,454.45	ZZ
NLYBA3		1.135	-0.001	-0.48	1.134	-0.003	-1.09	ZZ
PMC6MH		1.141	0.004	1.51	1.139	0.002	0.77	ZZ
QPVJT4		1.136	-0.001	-0.35	1.137	0.000	0.07	ZZ
QXPLWZ		1.134	-0.003	-0.85	1.132	-0.005	-1.86	ZZ
RDDJAF		1.137	0.000	0.16	1.140	0.003	1.12	ZZ
TFYKUU		1.130	-0.006	-2.14	1.131	-0.006	-2.05	ZZ
TJV99F		1.134	-0.003	-0.90	1.135	-0.002	-0.72	ZZ
TT92ZY		1.130	-0.007	-2.20	1.130	-0.007	-2.38	ZZ
TX33ZR		1.138	0.001	0.33	1.137	0.000	0.07	ZZ
UA8FWJ		1.138	0.002	0.57	1.139	0.002	0.68	ZZ
UUDB72		1.139	0.002	0.84	1.138	0.001	0.24	ZZ
UXW8UR		1.138	0.001	0.33	1.138	0.001	0.42	ZZ
VEXCYE		1.135	-0.002	-0.57	1.136	-0.001	-0.25	ZZ
X3G4BD		1.137	0.000	-0.01	1.136	-0.001	-0.46	ZZ
X7J3NR		1.137	0.000	0.04	1.137	0.000	-0.11	ZZ
XQHQTR	X	1.134	-0.003	-0.85	1.124	-0.013	-4.66	ZZ
Y4PX74	*	1.131	-0.006	-2.03	1.135	-0.002	-0.81	ZZ
Y7D8HQ		1.137	0.000	0.08	1.136	-0.001	-0.26	ZZ
YBLQGJ	X	1.072	-0.065	-21.96	1.089	-0.048	-16.91	ZZ
YGWLKT		1.138	0.001	0.50	1.137	0.000	0.07	ZZ
YVR9ME		1.137	0.000	-0.01	1.138	0.001	0.24	ZZ
ZHZWRF	X	1.136	-0.001	-0.19	1.128	-0.009	-3.03	ZZ

Summary Statistics

	Sample B51	Sample B52
Grand Means	1.1365 Mg/M^3	1.1368 Mg/M^3
Stnd Dev Btwn Labs	0.0030 Mg/M^3	0.0029 Mg/M^3

Statistics based on 59 of 66 reporting participants

Samples B51-B52: Polyisoprene compound, batch #1 & B53-B54: Polyisoprene compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 621

Density

Comments on assigned Data Flags for Test #621

4RFPUM (X) - Inconsistency in testing between Sample groups. Data for Sample group B51-B52 are low. Inconsistency in testing within Sample group B51-B52.

CMUWWR (X) - Data for all Samples are high. Possible systematic error.

KCMPUX (X) - Data appear to be off by a factor of 1000. Data corrected by CTS (x.001)

MWMRMJ (X) - Extreme data.

XQHQTR (X) - Inconsistency in testing between Sample groups. Data for Sample group B53-B54 are low. Inconsistency in testing within both Sample groups.

YBLQGJ (X) - Extreme data.

ZHZWRF (X) - Inconsistency in testing between Sample groups. Data for Sample group B53-B54 are low. Inconsistency in testing within Sample group B51-B52.

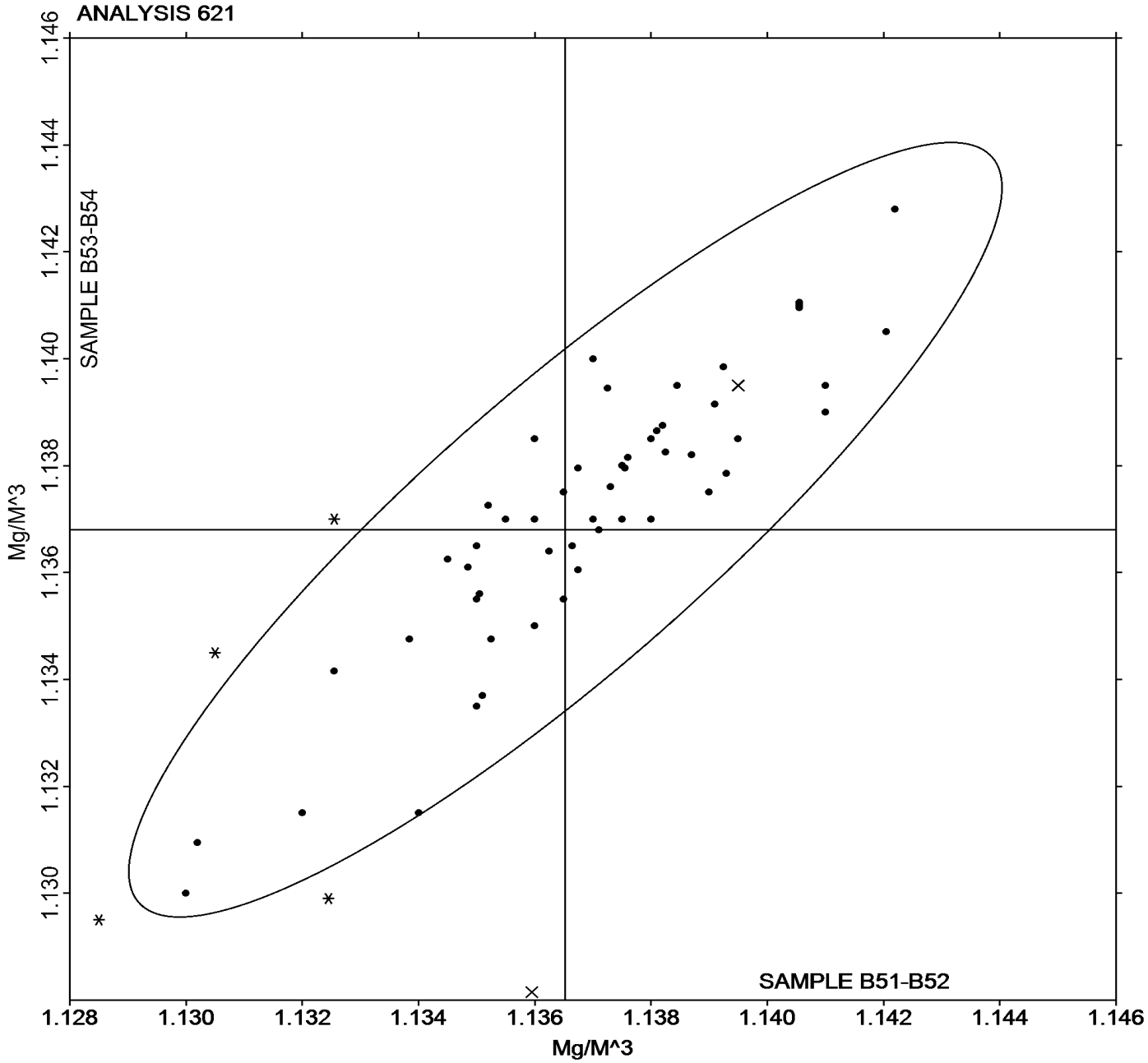
Rubber Interlaboratory Testing Program

Analysis 621

Density

Grand Mean Sample **B51** = 1.1365 Mg/M^3

Grand Mean Sample **B52** = 1.1368 Mg/M^3



Rubber Interlaboratory Testing Program

Analysis 630

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

WebCode	Data Flag	Sample K51 Lab Mean	Sample K51 Diff from Grand Mean	Sample K51 CPV	Sample K52 Lab Mean	Sample K52 Diff from Grand Mean	Sample K52 CPV	Instr Code
2Q9T88		3,525.0	-7.6	-0.07	2,843.5	-356.0	-2.05	ZZ
7P6QA6		3,604.0	71.4	0.65	3,245.5	46.0	0.26	ZZ
8EGCMD		3,603.5	70.9	0.64	3,293.5	94.0	0.54	ZZ
94BULA		3,488.9	-43.7	-0.40	3,416.1	216.6	1.25	ZZ
9EU4CN	X	3,043.1	-489.5	-4.45	2,079.5	-1,120.1	-6.46	ZZ
9YGXX4		3,316.3	-216.2	-1.96	2,975.5	-224.1	-1.29	ZZ
AHBQLM		3,622.0	89.4	0.81	3,172.5	-27.0	-0.16	ZZ
CMUWWJ		3,568.5	35.9	0.33	3,297.3	97.8	0.56	ZZ
E3KEZF		3,510.0	-22.6	-0.20	3,212.0	12.5	0.07	ZZ
E4E67U	M	3,433.5	-99.1	-0.90	3,082.0	-117.5	-0.68	ZZ
EGGVPD		3,742.0	209.5	1.90	3,314.1	114.6	0.66	ZZ
EYK9JN		3,492.3	-40.3	-0.37	3,264.3	64.7	0.37	ZZ
F88QDM		3,441.2	-91.4	-0.83	3,249.2	49.6	0.29	ZZ
F93AEP		3,568.0	35.4	0.32	3,301.1	101.6	0.59	ZZ
G6ZQRG		3,420.0	-112.6	-1.02	2,789.1	-410.5	-2.37	ZZ
GNUNU9		3,648.7	116.1	1.05	3,397.6	198.1	1.14	ZZ
HDAE8Z		3,380.5	-152.1	-1.38	3,238.0	38.5	0.22	ZZ
J6C7XT		3,743.5	210.9	1.92	3,581.0	381.5	2.20	ZZ
K3ZR7D	X	3,001.5	-531.1	-4.82	2,630.5	-569.0	-3.28	ZZ
K4UHBT		3,399.3	-133.3	-1.21	3,056.3	-143.2	-0.83	ZZ
KCMPUX		3,339.0	-193.6	-1.76	2,932.5	-267.0	-1.54	ZZ
KLVJNQ		3,588.2	55.6	0.51	3,112.8	-86.7	-0.50	ZZ
KPUXCF		3,589.7	57.2	0.52	3,161.9	-37.7	-0.22	ZZ
LXLDYY		3,572.9	40.3	0.37	3,357.9	158.4	0.91	ZZ
NLYBA3	X	3,557.5	24.9	0.23	2,525.7	-673.8	-3.88	ZZ
QVNLW4		3,527.3	-5.2	-0.05	3,188.0	-11.6	-0.07	ZZ
RADB66		3,519.2	-13.4	-0.12	3,160.9	-38.6	-0.22	ZZ
UXW8UR		3,638.5	105.9	0.96	3,363.0	163.5	0.94	ZZ
VFRV32		3,375.0	-157.6	-1.43	3,294.5	95.0	0.55	ZZ
XQHQTR		3,657.0	124.4	1.13	3,043.0	-156.5	-0.90	ZZ
Y4PX74		3,517.4	-15.2	-0.14	3,217.5	17.9	0.10	ZZ
ZA8QWU		3,580.0	47.4	0.43	3,255.5	56.0	0.32	ZZ
ZHKFV3		3,466.4	-66.1	-0.60	3,053.1	-146.5	-0.84	ZZ

Rubber Interlaboratory Testing Program

Analysis 630

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

Summary Statistics

Grand Means	3,532.55 psi	3,199.55 psi
Stnd Dev Btwn Labs	110.09 psi	173.48 psi

Statistics based on 29 of 33 reporting participants

Summary Statistics in SI Units

Grand Means	24.356 MPa	22.06 MPa
Stnd Dev Btwn Labs	0.759 MPa	1.20 MPa

Statistics based on 29 of 33 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #630

9EU4CN (X) - Data for all Samples are low. Inconsistency in testing within Sample group K51-K52.

E4E67U (M) - Data not reported for Sample K52.

K3ZR7D (X) - Data for all Samples are low. Inconsistency in testing within Sample group K51-K52.

NLYBA3 (X) - Data for Sample group K51-K52 are low.

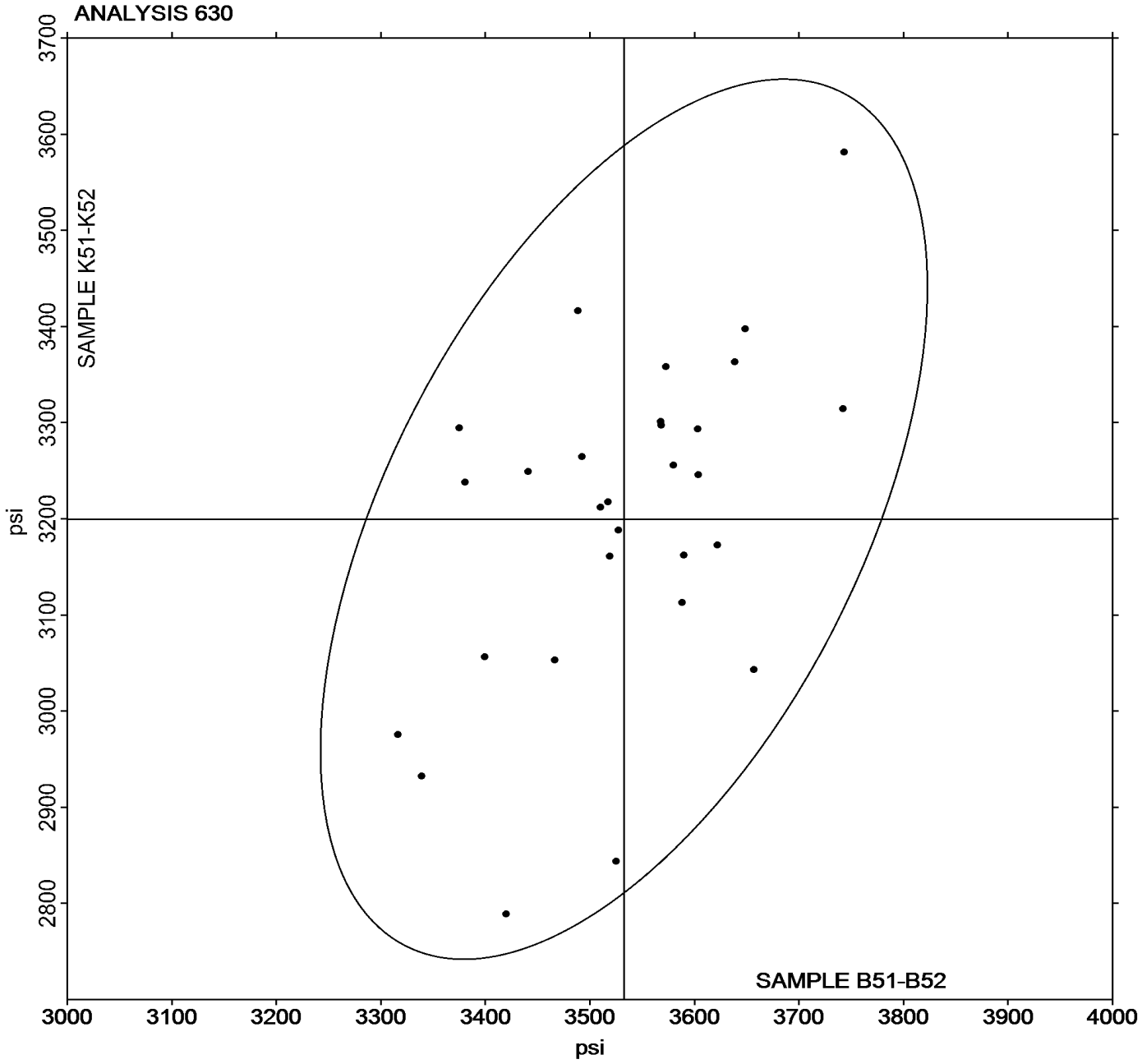
Rubber Interlaboratory Testing Program

Analysis 630

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

Grand Mean Sample **K51** = 3,532.55 psi

Grand Mean Sample **K52** = 3,199.55 psi



Rubber Interlaboratory Testing Program

Analysis 631

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

WebCode	Data Flag	Sample K51 Lab Mean	Sample K51 Diff from Grand Mean	Sample K51 CPV	Sample K52 Lab Mean	Sample K52 Diff from Grand Mean	Sample K52 CPV	Instr Code
2Q9T88		634.5	18.3	0.67	595.0	29.8	1.33	ZZ
7P6QA6		644.5	28.3	1.03	572.0	6.8	0.30	ZZ
8EGCMD		668.0	51.8	1.88	622.0	56.8	2.53	ZZ
94BULA		632.8	16.6	0.60	587.2	22.0	0.98	ZZ
9EU4CN	X	682.7	66.5	2.41	463.5	-101.7	-4.53	ZZ
9YGXX4	*	537.5	-78.7	-2.85	518.0	-47.2	-2.10	ZZ
AHBQLM		629.0	12.8	0.47	563.5	-1.7	-0.07	ZZ
CMUWW]		623.4	7.2	0.26	560.1	-5.1	-0.23	ZZ
E3KEZF		606.0	-10.2	-0.37	544.0	-21.2	-0.94	ZZ
E4E67U	M	634.5	18.3	0.67	571.0	5.8	0.26	ZZ
EGGVPD		626.6	10.4	0.38	561.4	-3.8	-0.17	ZZ
EYK9JN		604.5	-11.7	-0.42	567.5	2.3	0.10	ZZ
F88QDM		580.5	-35.7	-1.29	547.0	-18.2	-0.81	ZZ
F93AEP		613.4	-2.7	-0.10	563.4	-1.7	-0.08	ZZ
G6ZQRG		623.4	7.3	0.26	570.1	5.0	0.22	ZZ
GNUNU9		628.1	11.9	0.43	588.9	23.8	1.06	ZZ
HDAE8Z		593.8	-22.4	-0.81	552.5	-12.7	-0.56	ZZ
J6C7XT		596.0	-20.1	-0.73	539.5	-25.6	-1.14	ZZ
K3ZR7D	*	565.0	-51.2	-1.86	565.5	0.3	0.02	ZZ
K4UHBT		629.0	12.8	0.47	583.0	17.8	0.79	ZZ
KCMPUX		631.5	15.3	0.56	559.5	-5.7	-0.25	ZZ
KLVJNQ		623.0	6.9	0.25	582.7	17.6	0.78	ZZ
KPUXCF		635.0	18.8	0.68	594.0	28.8	1.28	ZZ
LXLDYY		613.1	-3.1	-0.11	579.6	14.4	0.64	ZZ
NLYBA3		635.5	19.3	0.70	550.2	-15.0	-0.67	ZZ
QVNLW4		642.0	25.8	0.94	586.0	20.8	0.93	ZZ
RADB66		605.5	-10.7	-0.39	562.0	-3.2	-0.14	ZZ
UXW8UR		628.0	11.8	0.43	573.5	8.3	0.37	ZZ
VFRV32		564.0	-52.2	-1.89	542.5	-22.7	-1.01	ZZ
XQHQTR		640.5	24.3	0.88	555.0	-10.2	-0.45	ZZ
Y4PX74		584.0	-32.2	-1.17	511.5	-53.7	-2.39	ZZ
ZA8QWU		630.0	13.8	0.50	557.0	-8.2	-0.36	ZZ
ZHKFV3		633.1	16.9	0.61	565.8	0.6	0.03	ZZ

Rubber Interlaboratory Testing Program

Analysis 631

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

Summary Statistics

	Precured	Lab-Cured
Grand Means	616.17 percent	565.16 percent
Stnd Dev Btwn Labs	27.56 percent	22.44 percent

Statistics based on 31 of 33 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #631

9EU4CN (X) - Data for Sample group K51-K52 are low. Inconsistency in testing within both Sample groups.

E4E67U (M) - Data not reported for Sample K52.

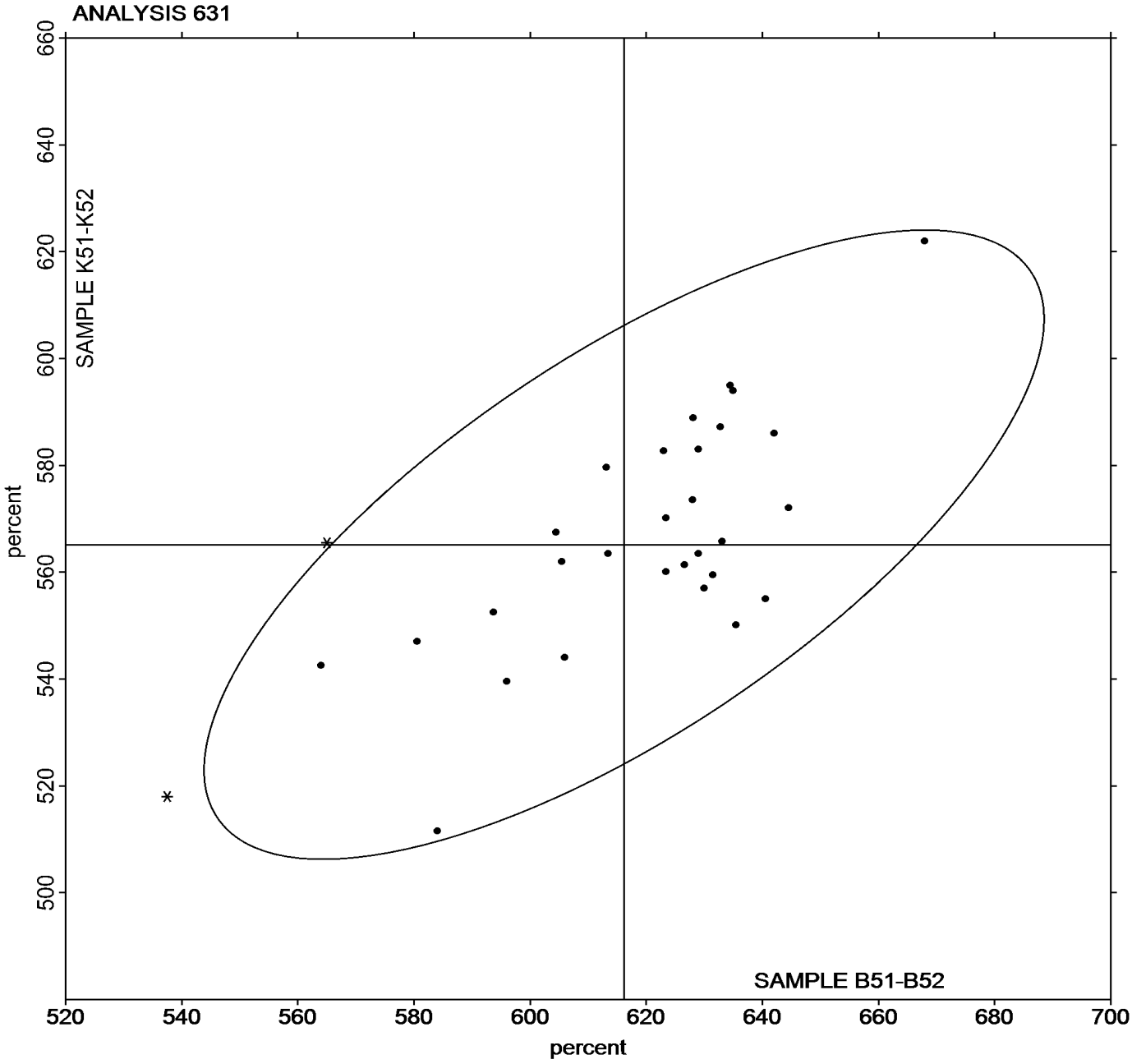
Rubber Interlaboratory Testing Program

Analysis 631

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

Grand Mean Sample **K51** = 616.17 percent

Grand Mean Sample **K52** = 565.16 percent



Rubber Interlaboratory Testing Program

Analysis 632

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

WebCode	Data Flag	Sample K51 Lab Mean	Sample K51 Diff from Grand Mean	Sample K51 CPV	Sample K52 Lab Mean	Sample K52 Diff from Grand Mean	Sample K52 CPV	Instr Code
2Q9T88		994.5	-58.0	-0.94	858.0	-274.6	-2.29	ZZ
7P6QA6		1,023.0	-29.5	-0.48	1,215.0	82.4	0.69	ZZ
8EGCMD		988.0	-64.5	-1.05	1,049.5	-83.1	-0.69	ZZ
94BULA		1,046.1	-6.5	-0.11	1,175.3	42.7	0.36	ZZ
9EU4CN	X	723.7	-328.9	-5.32	855.6	-277.1	-2.31	ZZ
9YGXX4		1,184.2	131.7	2.13	1,176.3	43.7	0.36	ZZ
AHBQLM		1,112.5	60.0	0.97	1,115.0	-17.6	-0.15	ZZ
CMUWW]		1,054.0	1.4	0.02	1,159.9	27.3	0.23	ZZ
E3KEZF		1,023.5	-29.0	-0.47	1,161.5	28.9	0.24	ZZ
E4E67U	M	1,005.0	-47.5	-0.77	1,044.0	-88.6	-0.74	ZZ
EGGVPD		1,125.5	73.0	1.18	1,240.8	108.2	0.90	ZZ
EYK9JN		1,081.4	28.9	0.47	1,154.1	21.4	0.18	ZZ
F88QDM		1,103.4	50.9	0.82	1,243.6	110.9	0.92	ZZ
F93AEP		1,047.4	-5.1	-0.08	1,189.4	56.7	0.47	ZZ
G6ZQRG		996.8	-55.8	-0.90	978.9	-153.7	-1.28	ZZ
GNUNU9		1,106.4	53.8	0.87	1,215.5	82.9	0.69	ZZ
HDAE8Z		1,027.0	-25.5	-0.41	1,179.5	46.9	0.39	ZZ
J6C7XT		1,111.7	59.2	0.96	1,307.5	174.9	1.46	ZZ
K3ZR7D		1,009.5	-43.0	-0.70	905.5	-227.1	-1.89	ZZ
K4UHBT		952.3	-100.3	-1.62	1,028.1	-104.5	-0.87	ZZ
KLVJNQ		1,065.3	12.7	0.21	1,070.0	-62.6	-0.52	ZZ
KPUXCF		1,000.8	-51.8	-0.84	986.3	-146.3	-1.22	ZZ
LXLDYY		1,114.9	62.3	1.01	1,122.6	-10.0	-0.08	ZZ
NLYBA3		1,037.6	-14.9	-0.24	973.1	-159.6	-1.33	ZZ
QVNLW4		954.4	-98.2	-1.59	1,081.3	-51.3	-0.43	ZZ
RADB66		1,068.0	15.5	0.25	1,136.5	3.9	0.03	ZZ
UXW8UR		1,052.0	-0.5	-0.01	1,171.0	38.4	0.32	ZZ
VFRV32		1,203.0	150.5	2.44	1,371.0	238.4	1.98	ZZ
XQHQTR		1,010.5	-42.0	-0.68	1,163.0	30.4	0.25	ZZ
Y4PX74		1,089.8	37.2	0.60	1,363.4	230.7	1.92	ZZ
ZA8QWU		978.0	-74.5	-1.21	1,066.0	-66.6	-0.55	ZZ
ZHKFV3		1,015.3	-37.3	-0.60	1,121.2	-11.5	-0.10	ZZ

Summary Statistics

	Sample K51	Sample K52
Grand Means	1,052.55 psi	1,132.61 psi
Stnd Dev Btwn Labs	61.77 psi	120.17 psi

Statistics based on 30 of 32 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	7.2570 MPa	7.81 MPa
Stnd Dev Btwn Labs	0.4259 MPa	0.83 MPa

Statistics based on 30 of 32 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #632

9EU4CN (X) - Data for Sample group B51-B52 are low. Inconsistency in testing within Sample group K51-K52.

E4E67U (M) - Data not reported for Sample group K51-K52.

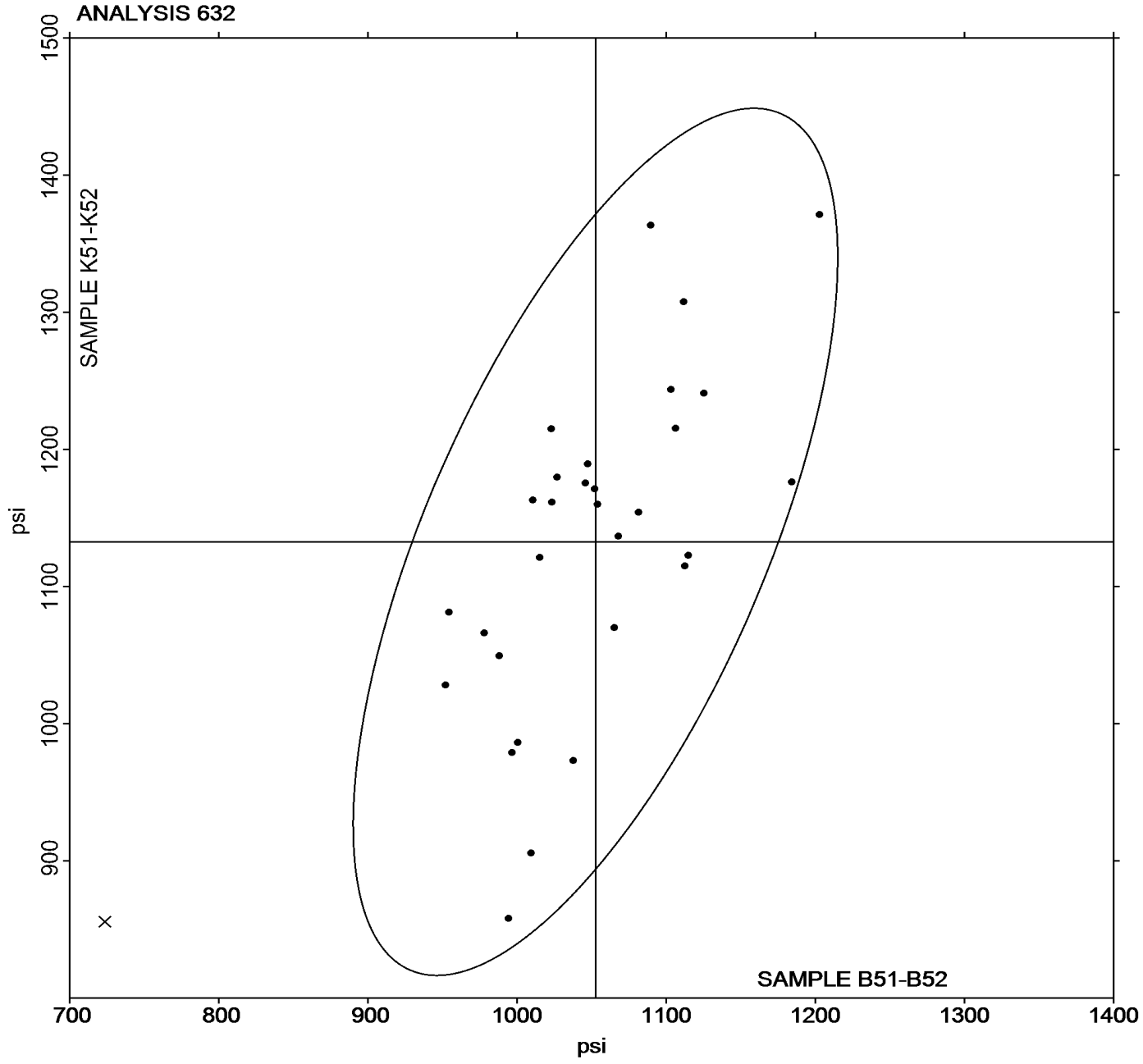
Rubber Interlaboratory Testing Program

Analysis 632

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

Grand Mean Sample **K51** = 1,052.55 psi

Grand Mean Sample **K52** = 1,132.61 psi



Rubber Interlaboratory Testing Program

Analysis 633

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

WebCode	Data Flag	Sample K51 Lab Mean	Sample K51 Diff from Grand Mean	Sample K51 CPV	Sample K52 Lab Mean	Sample K52 Diff from Grand Mean	Sample K52 CPV	Instr Code
2Q9T88		206.5	-12.2	-1.01	189.5	-53.4	-2.31	ZZ
7P6QA6		213.0	-5.7	-0.47	263.0	20.1	0.87	ZZ
8EGCMD		219.0	0.3	0.02	248.0	5.1	0.22	ZZ
94BULA		215.2	-3.5	-0.29	245.8	2.9	0.13	ZZ
9EU4CN	X	157.9	-60.8	-5.00	192.8	-50.1	-2.17	ZZ
9YGXX4		246.6	27.8	2.29	254.5	11.7	0.51	ZZ
AHBQLM	X	329.0	110.3	9.06	244.0	1.1	0.05	ZZ
CMUWW1		229.9	11.2	0.92	258.5	15.6	0.67	ZZ
E3KEZF		220.5	1.8	0.14	247.0	4.1	0.18	ZZ
E4E67U	M	211.0	-7.7	-0.64	229.0	-13.9	-0.60	ZZ
EGGVPD		226.3	7.5	0.62	257.4	14.6	0.63	ZZ
EYK9JN		225.0	6.3	0.51	249.5	6.6	0.29	ZZ
F88QDM		230.5	11.8	0.97	274.6	31.7	1.37	ZZ
F93AEP		215.9	-2.9	-0.24	263.6	20.8	0.90	ZZ
G6ZQRG		231.2	12.4	1.02	229.4	-13.5	-0.58	ZZ
GNUNU9		234.0	15.3	1.25	263.2	20.4	0.88	ZZ
HDAE8Z		206.5	-12.2	-1.01	243.0	0.1	0.01	ZZ
J6C7XT		228.4	9.7	0.80	266.9	24.0	1.04	ZZ
K3ZR7D		205.5	-13.2	-1.09	188.5	-54.4	-2.35	ZZ
K4UHBT		202.2	-16.6	-1.36	226.6	-16.3	-0.71	ZZ
KCMPUX		201.5	-17.2	-1.42	224.5	-18.4	-0.79	ZZ
KLVJNQ		221.6	2.8	0.23	221.5	-21.4	-0.92	ZZ
KPUXCF		203.1	-15.7	-1.29	217.6	-25.3	-1.10	ZZ
LXLDYY		218.4	-0.3	-0.03	225.0	-17.9	-0.78	ZZ
NLYBA3	*	240.5	21.8	1.79	220.4	-22.5	-0.97	ZZ
QVNLW4		201.6	-17.1	-1.41	238.6	-4.3	-0.18	ZZ
RADB66		219.0	0.3	0.02	233.0	-9.9	-0.43	ZZ
UXW8UR		222.0	3.3	0.27	257.5	14.6	0.63	ZZ
VFRV32		232.5	13.8	1.13	278.5	35.6	1.54	ZZ
XQHQTR		209.5	-9.2	-0.76	239.0	-3.9	-0.17	ZZ
Y4PX74		221.3	2.5	0.21	285.1	42.2	1.83	ZZ
ZA8QWU		211.0	-7.7	-0.64	238.5	-4.4	-0.19	ZZ
ZHKFV3		204.5	-14.2	-1.17	237.9	-5.0	-0.22	ZZ

Rubber Interlaboratory Testing Program

Analysis 633

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

Summary Statistics

Grand Means	218.75 psi	242.86 psi
Stnd Dev Btwn Labs	12.17 psi	23.10 psi

Statistics based on 30 of 33 reporting participants

Summary Statistics in SI Units

Grand Means	1.5082 MPa	1.67 MPa
Stnd Dev Btwn Labs	0.0839 MPa	0.16 MPa

Statistics based on 30 of 33 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #633

9EU4CN (X) - Data for Sample group B51-B52 are low. Inconsistency in testing within Sample group B51-B52.

AHBQLM (X) - Extreme data for Sample group B51-B52.

E4E67U (M) - Data not reported for Sample group K51-K52.

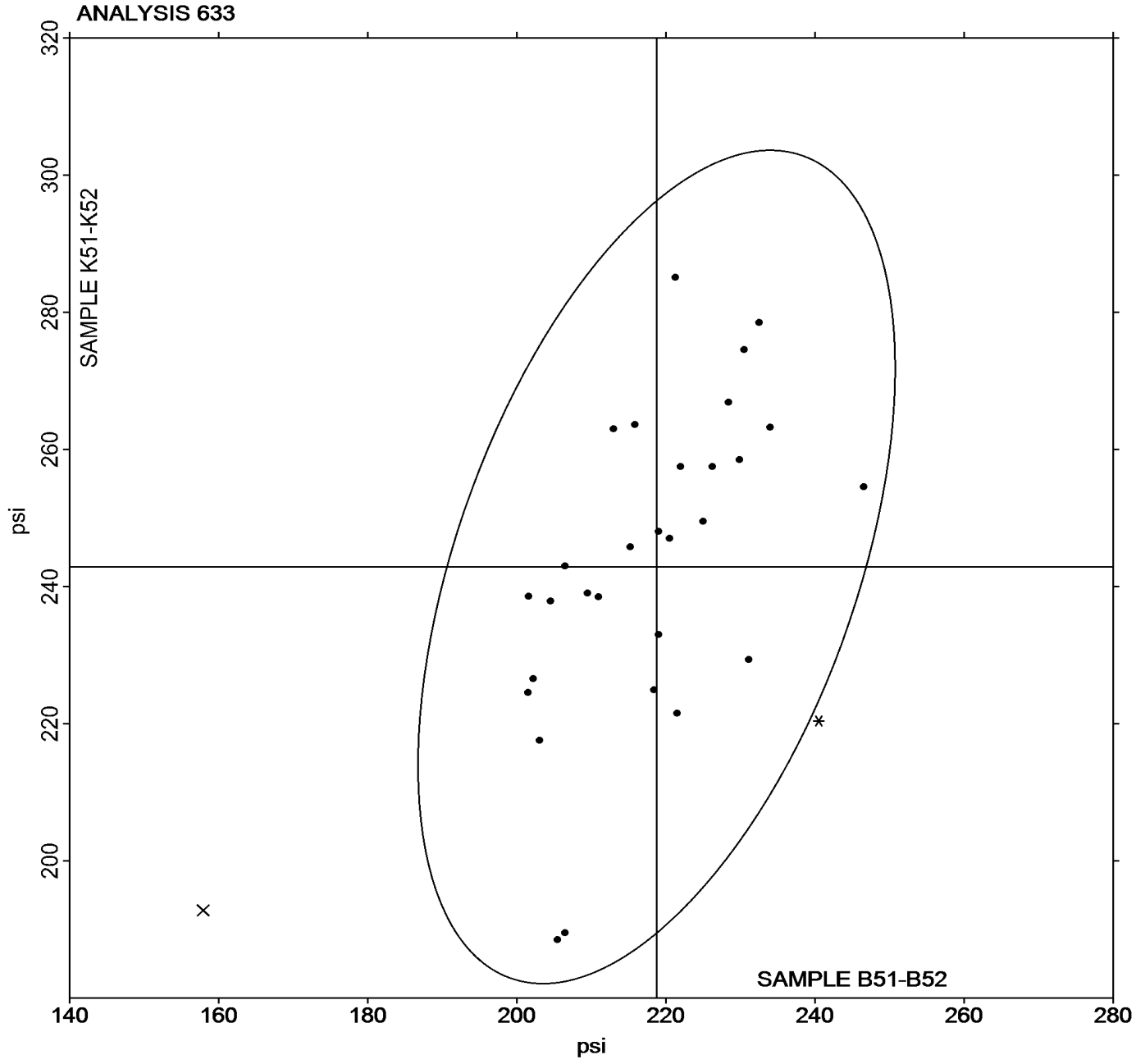
Rubber Interlaboratory Testing Program

Analysis 633

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

Grand Mean Sample **K51** = 218.75 psi

Grand Mean Sample **K52** = 242.86 psi



Rubber Interlaboratory Testing Program

Analysis 660

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

WebCode	Data Flag	Sample T51 Lab Mean	Sample T51 Diff from Grand Mean	Sample T51 CPV	Sample T52 Lab Mean	Sample T52 Diff from Grand Mean	Sample T52 CPV	Instr Code
42LW82		46.36	-0.61	-0.53	55.87	-0.63	-0.53	MP
4RFPUM		48.70	1.73	1.51	58.23	1.73	1.46	MR
7MFKQT		47.08	0.10	0.09	56.61	0.11	0.10	MR
9YGXX4		48.38	1.41	1.23	57.37	0.87	0.73	MR
C6VHXL		47.57	0.59	0.52	57.03	0.53	0.45	MR
CMUWWJ		45.94	-1.03	-0.90	56.11	-0.39	-0.33	TV
DT3FW6		47.90	0.93	0.81	57.47	0.97	0.82	MR
E3KEZF		46.22	-0.76	-0.66	55.85	-0.65	-0.55	MR
E4E67U		46.28	-0.69	-0.60	55.32	-1.18	-1.00	MR
EGGVPD		47.15	0.18	0.15	56.53	0.03	0.03	MR
EQ4W43		47.27	0.29	0.26	56.48	-0.02	-0.01	MR
F6MY47		46.48	-0.49	-0.43	55.52	-0.98	-0.83	MR
F88QDM		47.77	0.79	0.69	57.40	0.90	0.76	MR
F93AEP		47.32	0.34	0.30	56.88	0.38	0.32	MR
G7UGXV		45.83	-1.14	-1.00	55.90	-0.60	-0.51	MP
GBMFCQ		45.96	-1.02	-0.89	55.92	-0.58	-0.49	XX
GNUNU9		47.50	0.53	0.46	56.67	0.17	0.14	XX
J6C7XT		44.63	-2.34	-2.05	54.62	-1.88	-1.59	TV
K4UHBT		47.17	0.19	0.17	56.97	0.47	0.39	MR
KCMPUX		46.58	-0.39	-0.34	55.78	-0.72	-0.61	MR
KMQ6FW		47.28	0.31	0.27	56.97	0.47	0.39	MR
KPUXCF		46.53	-0.44	-0.39	54.85	-1.65	-1.39	MR
LDHVNX		45.08	-1.89	-1.66	54.72	-1.78	-1.51	MR
LXLDYY		46.72	-0.25	-0.22	56.80	0.29	0.25	MR
LZRYNK		46.05	-0.92	-0.81	54.70	-1.80	-1.52	MR
MNUFP6	*	47.15	0.18	0.15	58.25	1.75	1.48	MR
NLYBA3		48.23	1.26	1.10	57.60	1.10	0.93	TV
P69TVT	*	50.02	3.04	2.66	59.07	2.57	2.17	MR
RADB66		47.10	0.13	0.11	56.57	0.07	0.06	MR
TX33ZR		48.59	1.61	1.41	58.82	2.32	1.96	MR
U9EPQ6		47.60	0.63	0.55	56.55	0.05	0.04	MR
VEXCYE		47.88	0.91	0.80	56.92	0.42	0.35	MR
VHWQJJ		48.17	1.19	1.04	57.95	1.45	1.22	MR
X3G4BD		46.88	-0.09	-0.08	57.28	0.78	0.66	MR
XQHQTR		46.18	-0.79	-0.69	55.47	-1.03	-0.87	XX
Y4PX74		44.15	-2.82	-2.47	53.78	-2.72	-2.30	TV
ZA8QWU		47.13	0.16	0.14	56.40	-0.10	-0.08	MR
ZHKFV3		46.17	-0.81	-0.71	55.80	-0.70	-0.59	MR

Rubber Interlaboratory Testing Program

Analysis 660

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

Summary Statistics

Grand Means	46.974 ML 1 + 4	56.500 ML 1 + 4
Stnd Dev Btwn Labs	1.142 ML 1 + 4	1.184 ML 1 + 4

Statistics based on 38 of 38 reporting participants

Samples T51-T52: SBR & T53-T54: Butyl

Instrument Code Listing

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

Instruments:

(ML) Alpha Technologies/Monsanto model not specified

(MM) Alpha Technologies Model 1xxx or OSM

(MP) Monsanto Compact Mooney Viscometer

(MR) Alpha Technologies Model MV2000/MV2000E

(MZ) Rebuilt Monsanto Mooney Viscometer

(SF) Scott STI (any model)

(TV) Tech Pro Visc Tech (any model)

(XA) Special In-House Instrument

(XX) Instrument make/model not specified by lab

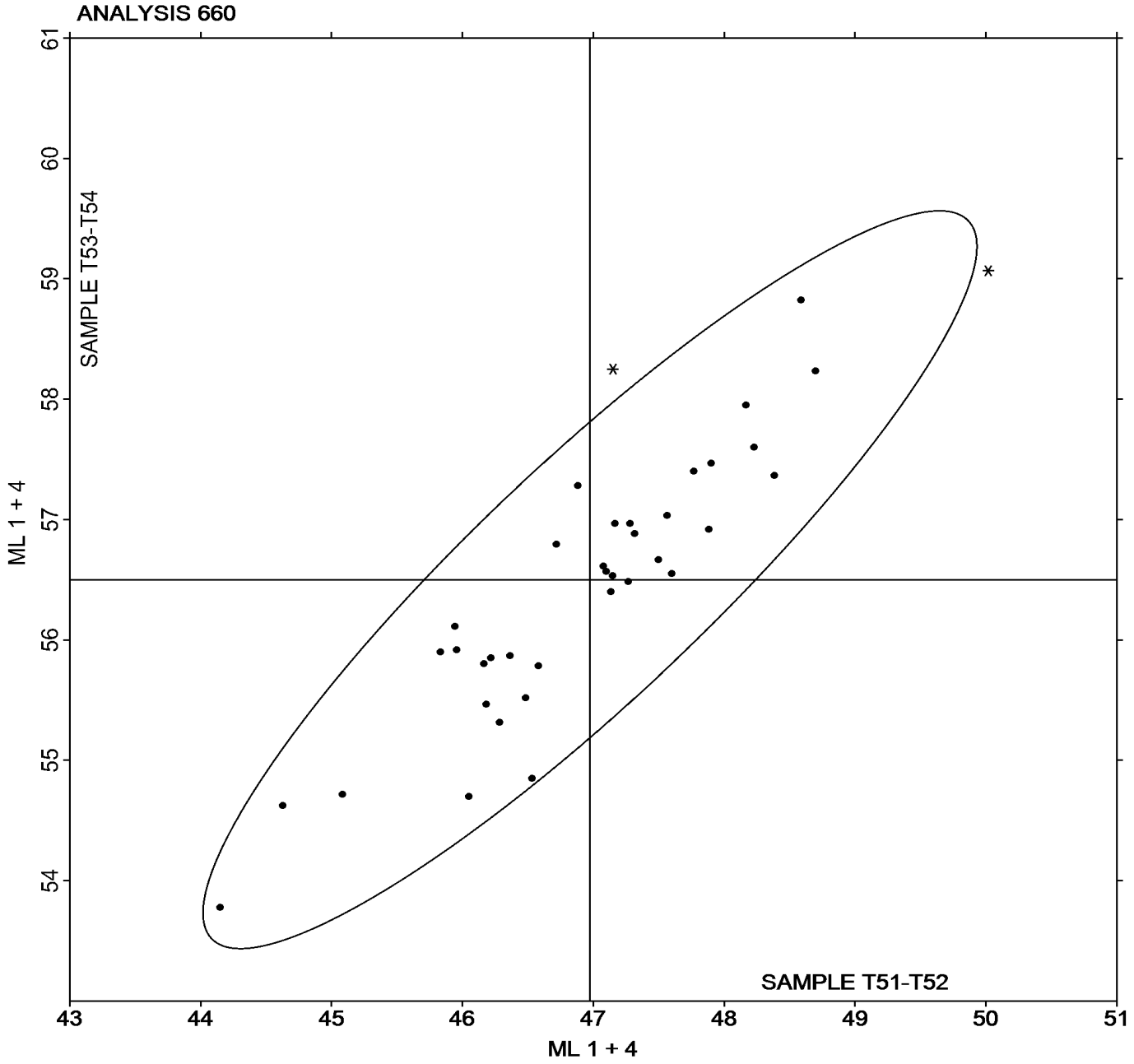
Rubber Interlaboratory Testing Program

Analysis 660

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

Grand Mean Sample **T51** = 46.974 ML 1 + 4

Grand Mean Sample **T52** = 56.500 ML 1 + 4



Rubber Interlaboratory Testing Program

Analysis 661

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

WebCode	Data Flag	Sample Lab Mean	Sample Diff from Grand Mean	Sample CPV	Sample Lab Mean	Sample Diff from Grand Mean	Sample CPV	Instr Code
42LW82		46.36	-0.61	-0.51	54.01	0.18	0.14	MR
4RFPUM		48.70	1.72	1.45	55.35	1.52	1.21	XX
7MFKQT		47.08	0.10	0.09	54.31	0.48	0.38	MR
9YGXX4		48.38	1.41	1.18	54.67	0.84	0.66	MR
C6VHXL		47.57	0.59	0.50	54.70	0.87	0.69	MR
CMUWW1		45.94	-1.03	-0.87	53.57	-0.26	-0.21	XX
DT3FW6		47.90	0.92	0.78	55.15	1.32	1.05	MR
E3KEZF		46.22	-0.76	-0.64	52.92	-0.91	-0.72	XX
E4E67U		46.28	-0.69	-0.58	53.18	-0.65	-0.51	MR
EQ4W43		47.27	0.29	0.24	53.68	-0.15	-0.12	MR
F6MY47		46.48	-0.49	-0.41	53.17	-0.66	-0.53	MR
F88QDM		47.77	0.79	0.66	54.78	0.95	0.76	MR
F93AEP		47.32	0.34	0.29	54.48	0.65	0.52	MR
G7UGXV		45.83	-1.14	-0.96	52.62	-1.21	-0.96	XX
GNUNU9		47.50	0.52	0.44	55.12	1.29	1.02	XX
J6C7XT		44.63	-2.35	-1.97	52.01	-1.82	-1.44	TV
K4UHBT		47.17	0.19	0.16	53.82	-0.01	-0.01	MR
KCMPUX		46.58	-0.39	-0.33	52.83	-1.00	-0.80	MP
KMQ6FW		47.28	0.31	0.26	54.02	0.19	0.15	MR
KPUXCF		46.53	-0.44	-0.37	52.12	-1.71	-1.36	MR
LDHVNX		45.08	-1.89	-1.59	53.00	-0.83	-0.66	MR
LXLDYY		46.72	-0.26	-0.21	53.93	0.10	0.08	MR
LZRYNK		46.05	-0.93	-0.78	52.13	-1.70	-1.35	MR
NLYBA3		48.23	1.25	1.05	54.68	0.85	0.67	TV
P69TVT	*	50.02	3.04	2.56	56.17	2.34	1.86	MR
RADB66		47.10	0.12	0.10	54.30	0.47	0.37	MR
TX33ZR		48.59	1.61	1.35	56.09	2.26	1.80	MR
VEXCYE		47.88	0.91	0.76	54.50	0.67	0.53	MR
VHWQJJ		48.17	1.19	1.00	54.45	0.62	0.49	MR
X3G4BD		46.88	-0.09	-0.08	54.93	1.10	0.88	MR
XQHQTR		46.18	-0.79	-0.67	51.95	-1.88	-1.49	XX
Y4PX74	*	44.15	-2.82	-2.37	50.34	-3.49	-2.77	TV
ZA8QWU		47.13	0.16	0.13	53.85	0.02	0.02	MR
ZHKFV3		46.17	-0.81	-0.68	53.40	-0.43	-0.34	MR

Rubber Interlaboratory Testing Program

Analysis 661

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

Summary Statistics

Grand Means	46.975 ML 1 + 8	53.830 ML 1 + 8
Stnd Dev Btwn Labs	1.190 ML 1 + 8	1.260 ML 1 + 8

Statistics based on 34 of 34 reporting participants

Please refer to the sample information provided for Analysis 660.

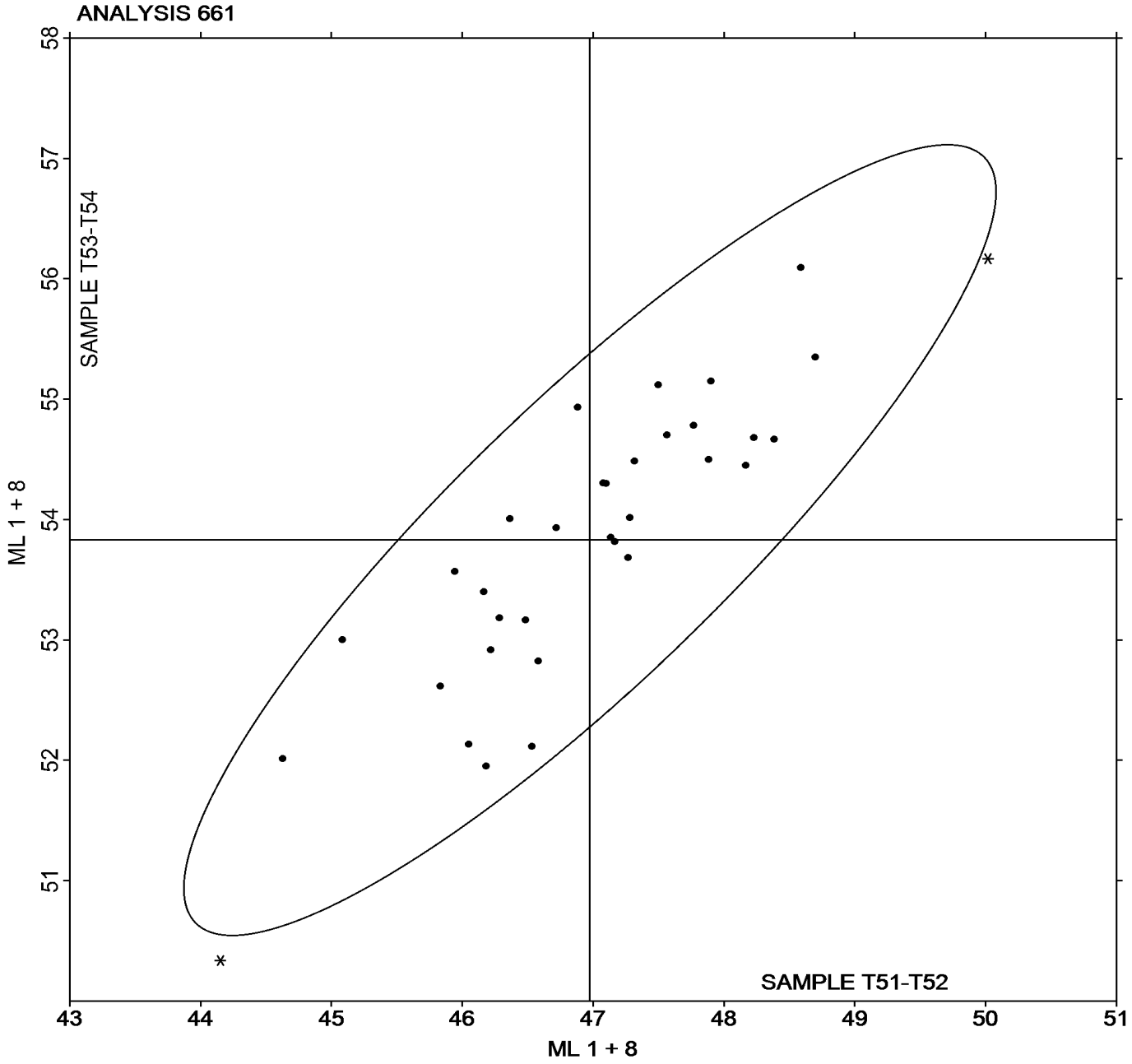
Rubber Interlaboratory Testing Program

Analysis 661

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

Grand Mean Sample = 46.975 ML 1 + 8

Grand Mean Sample = 53.830 ML 1 + 8



Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample T51 Lab Mean	Sample T51 Diff from Grand Mean	Sample T51 CPV	Sample T52 Lab Mean	Sample T52 Diff from Grand Mean	Sample T52 CPV	Instr Code
9YGXX4		11.75	0.81	0.55	8.190	0.102	0.23	MR
C6VHXL		11.47	0.54	0.36	8.077	-0.011	-0.03	MR
DT3FW6		10.73	-0.20	-0.14	7.900	-0.188	-0.43	MR
E3KEZF		11.73	0.79	0.53	8.000	-0.088	-0.20	MR
EQ4W43		10.98	0.04	0.03	7.900	-0.188	-0.43	MR
F6MY47		10.66	-0.27	-0.18	7.452	-0.636	-1.46	MR
F93AEP		11.34	0.41	0.27	8.057	-0.031	-0.07	MR
KPUXCF		12.33	1.40	0.94	8.567	0.479	1.10	XX
NLYBA3	X	1,150.70	1,139.77	766.55	619.100	611.012	1,400.99	TV
RADB66		9.99	-0.94	-0.63	7.607	-0.481	-1.10	MR
U9EPQ6		11.80	0.87	0.58	9.100	1.012	2.32	MR
ZA8QWU	*	6.67	-4.26	-2.87	7.867	-0.221	-0.51	MR
ZHKFV3		11.76	0.83	0.56	8.340	0.252	0.58	MR

Summary Statistics

	Sample T51	Sample T52
Grand Means	10.934 seconds	8.0879 seconds
Stnd Dev Btwn Labs	1.487 seconds	0.4361 seconds

Statistics based on 12 of 13 reporting participants

Samples T51-T52: SBR & T53-T54: Butyl

Comments on assigned Data Flags for Test #662

NLYBA3 (X) - Extreme data.

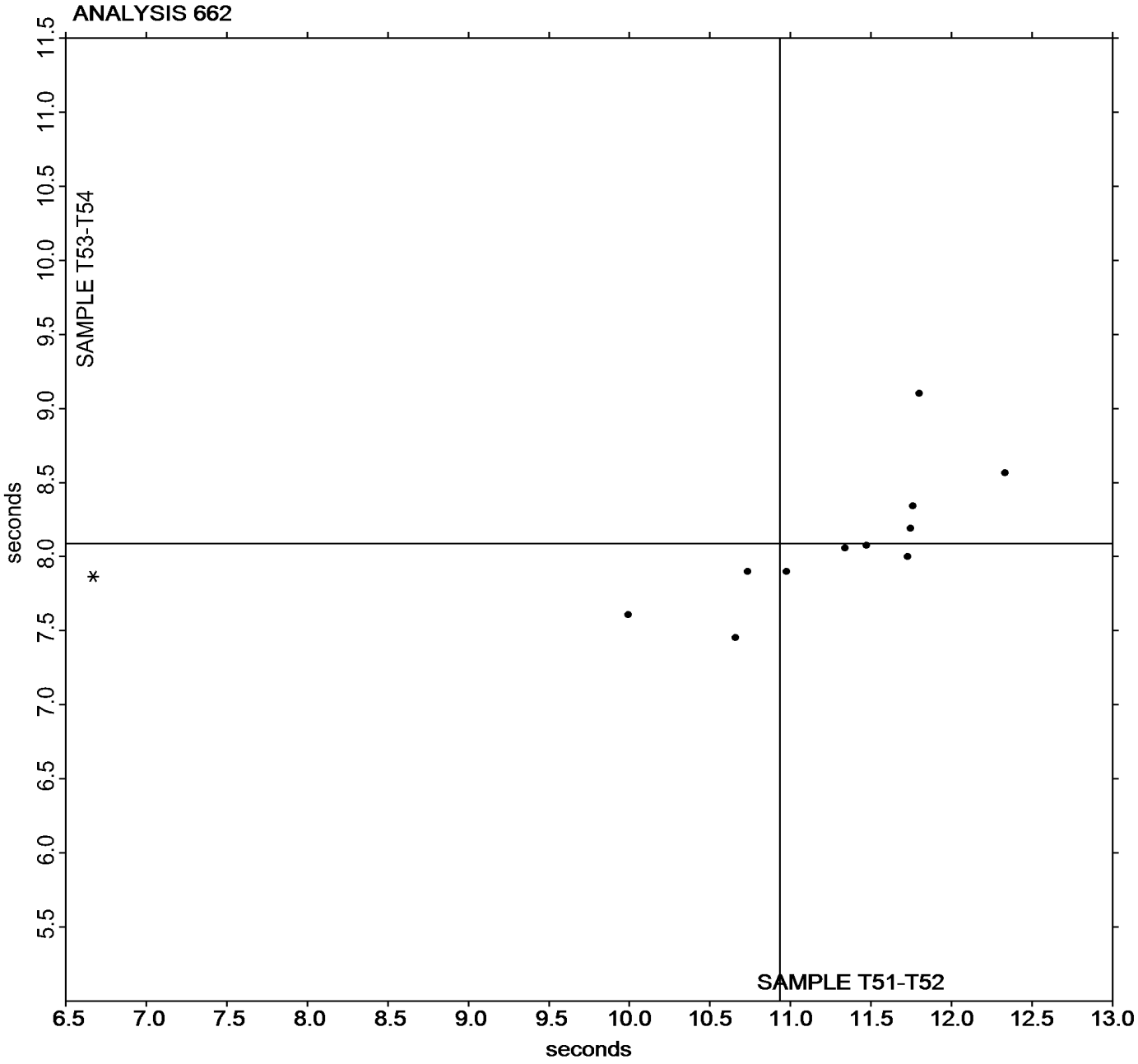
Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

Grand Mean Sample **T51** = 10.934 seconds

Grand Mean Sample **T52** = 8.0879 seconds



Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample T51 Lab Mean	Sample T51 Diff from Grand Mean	Sample T51 CPV	Sample T52 Lab Mean	Sample T52 Diff from Grand Mean	Sample T52 CPV	Instr Code
9YGXX4		86.13	-0.37	-0.31	91.26	-0.16	-0.39	MR
C6VHXL		86.30	-0.19	-0.16	91.38	-0.04	-0.10	MR
DT3FW6		86.82	0.33	0.27	91.70	0.29	0.70	MR
E3KEZF		86.21	-0.28	-0.24	91.43	0.02	0.04	MR
EQ4W43		86.48	-0.01	-0.01	91.65	0.24	0.58	MR
F6MY47		86.67	0.18	0.15	91.77	0.35	0.86	MR
F93AEP		86.30	-0.20	-0.17	91.28	-0.13	-0.32	MR
KPUXCF		85.63	-0.86	-0.72	91.02	-0.40	-0.97	XX
NLYBA3		84.34	-2.16	-1.82	90.43	-0.99	-2.42	TV
RADB66		87.26	0.77	0.65	92.02	0.61	1.48	MR
ZA8QWU	*	89.51	3.01	2.53	91.54	0.12	0.30	MR
ZHKFV3		86.28	-0.21	-0.18	91.51	0.10	0.23	MR

Summary Statistics

	Sample T51	Sample T52
Grand Means	86.494 percent	91.414 percent
Stnd Dev Btwn Labs	1.189 percent	0.408 percent

Statistics based on 12 of 12 reporting participants

Samples T51-T52: SBR & T53-T54: Butyl

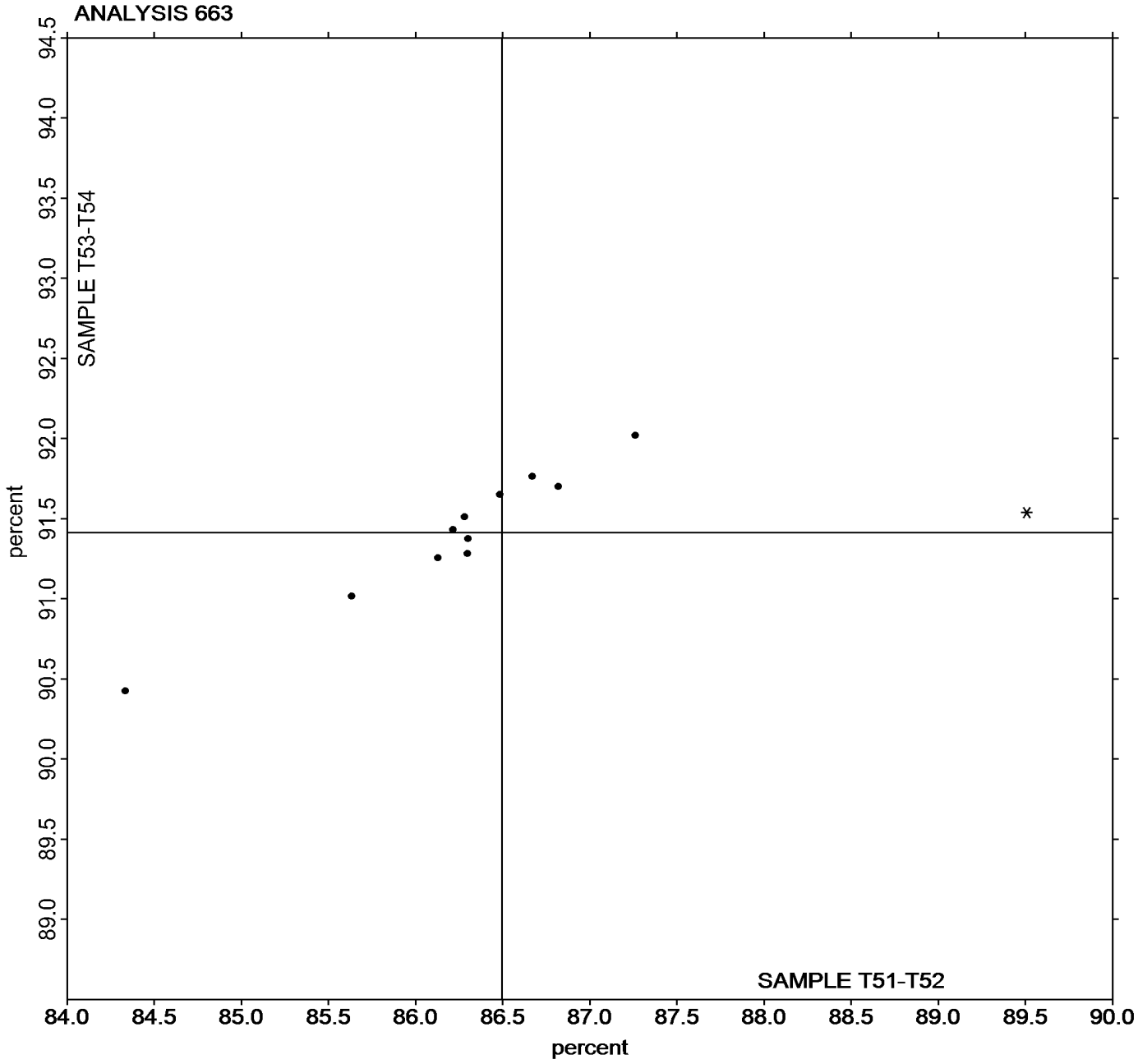
Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

Grand Mean Sample **T51** = 86.494 percent

Grand Mean Sample **T52** = 91.414 percent



Rubber Interlaboratory Testing Program

Analysis 664

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

WebCode	Data Flag	Sample T51 Lab Mean	Sample T51 Diff from Grand Mean	Sample T51 CPV	Sample T52 Lab Mean	Sample T52 Diff from Grand Mean	Sample T52 CPV	Instr Code
9YGXX4		724.1	70.3	0.96	535.9	16.2	0.54	MR
C6VHXL		704.2	50.4	0.69	528.9	9.2	0.31	MR
E3KEZF		686.9	33.0	0.45	508.8	-10.9	-0.36	MR
EQ4W43		681.5	27.6	0.38	501.5	-18.2	-0.61	MR
F6MY47		671.1	17.3	0.24	490.2	-29.5	-0.98	MR
F93AEP		698.3	44.4	0.61	534.0	14.3	0.48	MR
NLYBA3		561.0	-92.9	-1.27	590.6	70.9	2.36	TV
RADB66		645.2	-8.7	-0.12	487.8	-31.9	-1.06	MR
ZA8QWU		488.2	-165.7	-2.26	509.0	-10.7	-0.36	MR
ZHKFV3		678.2	24.3	0.33	510.3	-9.4	-0.31	XX

Summary Statistics

	Sample T51	Sample T52
Grand Means	653.86 M-s	519.70 M-s
Stnd Dev Btwn Labs	73.30 M-s	30.04 M-s

Statistics based on 10 of 10 reporting participants

Samples T51-T52: SBR & T53-T54: Butyl

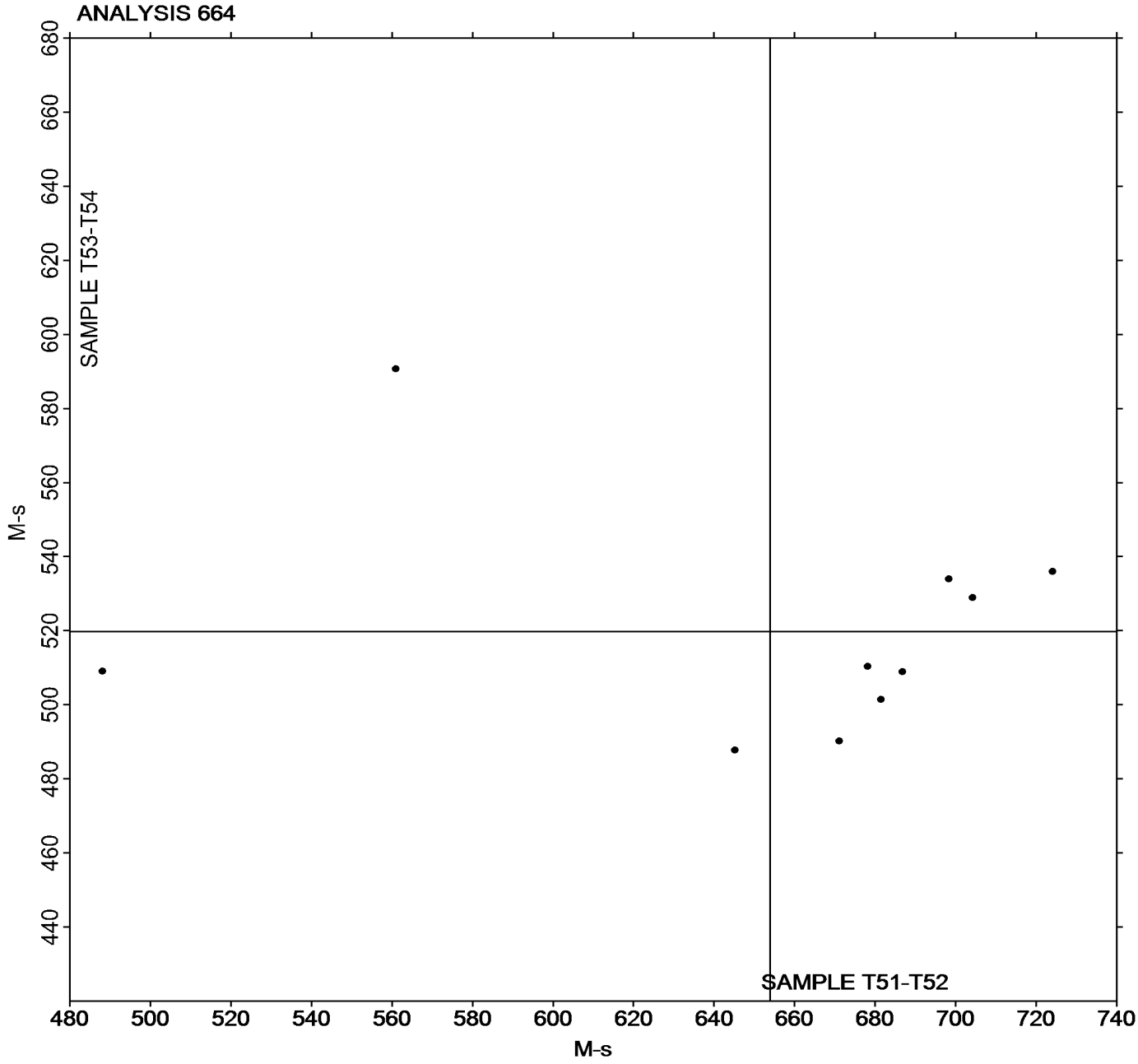
Rubber Interlaboratory Testing Program

Analysis 664

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

Grand Mean Sample **T51** = 653.86 M-s

Grand Mean Sample **T52** = 519.70 M-s



Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		1.948	-0.097	-0.89	1.610	-0.045	-0.38	ZZ
4RFPUM		1.975	-0.071	-0.65	1.578	-0.077	-0.65	ZZ
7MFKQT		1.847	-0.199	-1.83	1.602	-0.053	-0.45	ZZ
E4E67U		1.897	-0.149	-1.37	1.635	-0.020	-0.17	ZZ
G7UGXV		2.185	0.139	1.28	1.802	0.147	1.24	ZZ
K4UHBT		2.055	0.009	0.08	1.712	0.057	0.48	ZZ
KCMPUX		2.103	0.058	0.53	1.598	-0.057	-0.48	ZZ
KLVJNQ		2.038	-0.007	-0.07	1.665	0.010	0.08	ZZ
KPUXCF		2.115	0.069	0.63	1.438	-0.217	-1.83	ZZ
LDHVNX		2.197	0.151	1.38	1.835	0.180	1.52	ZZ
LHCMXF		2.163	0.118	1.08	1.832	0.177	1.49	ZZ
NLYBA3		2.067	0.021	0.19	1.525	-0.130	-1.10	ZZ
X3G4BD		2.005	-0.041	-0.37	1.685	0.030	0.25	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	2.0458 minutes	1.6551 minutes
Stnd Dev Btwn Labs	0.1090 minutes	0.1182 minutes

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

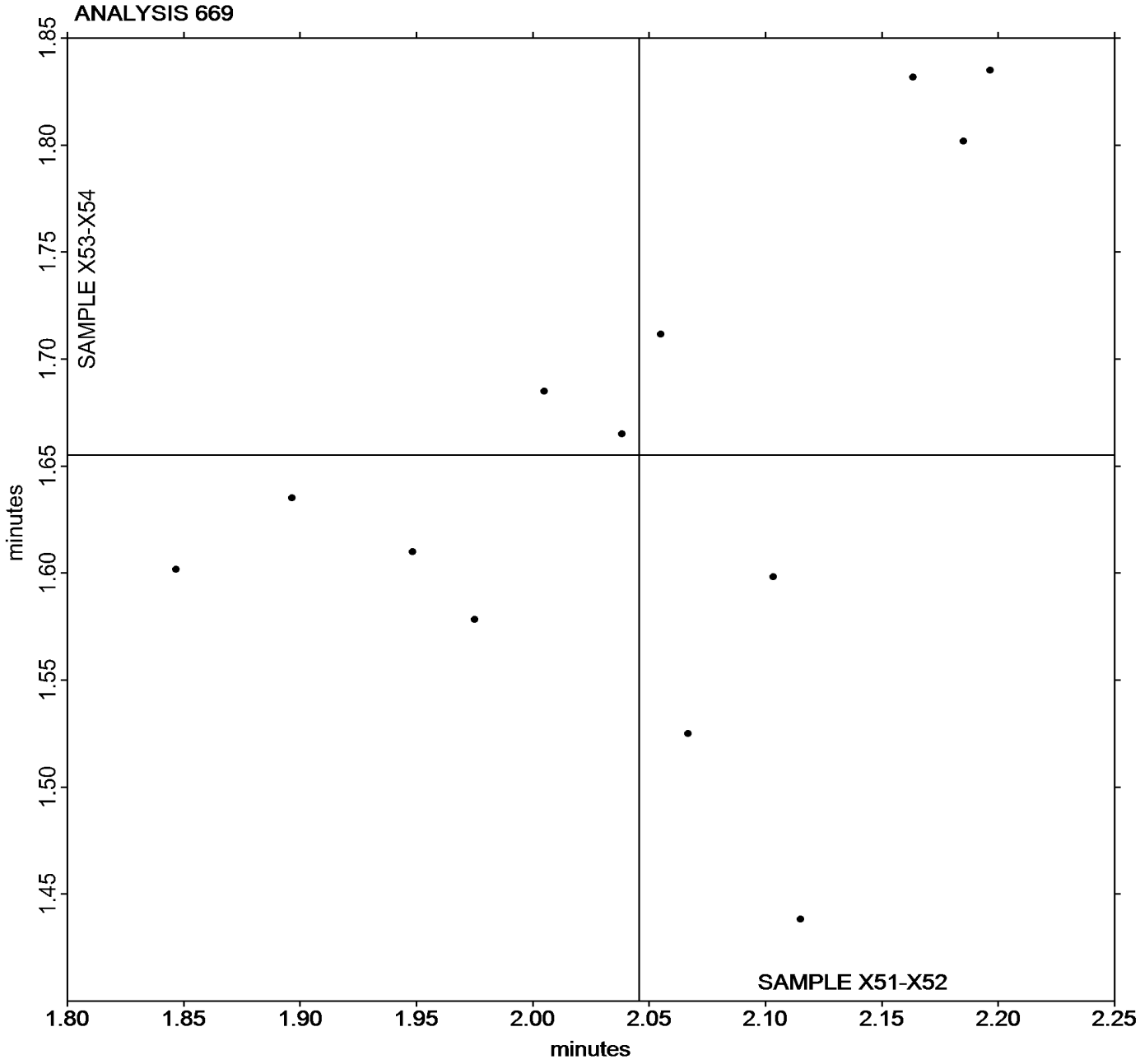
Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **X51** = 2.0458 minutes

Grand Mean Sample **X52** = 1.6551 minutes



Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		1.338	-0.134	-1.27	1.033	-0.070	-0.71	ZZ
4RFPUM		1.418	-0.054	-0.51	1.048	-0.055	-0.55	ZZ
7MFKQT		1.318	-0.154	-1.46	1.060	-0.043	-0.44	ZZ
E4E67U		1.370	-0.103	-0.97	1.097	-0.006	-0.06	ZZ
G7UGXV		1.653	0.181	1.70	1.222	0.119	1.20	ZZ
K4UHBT		1.425	-0.048	-0.45	1.108	0.005	0.05	ZZ
KCMPUX		1.580	0.107	1.01	1.090	-0.013	-0.13	ZZ
KLVJNQ		1.453	-0.019	-0.18	1.070	-0.033	-0.33	ZZ
KPUXCF		1.465	-0.008	-0.07	0.917	-0.186	-1.89	ZZ
LDHVNX		1.615	0.142	1.34	1.278	0.175	1.78	ZZ
LHCMXF		1.555	0.082	0.78	1.238	0.135	1.37	ZZ
NLYBA3		1.530	0.057	0.54	1.028	-0.075	-0.76	ZZ
X3G4BD		1.423	-0.049	-0.47	1.148	0.045	0.46	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	1.4727 minutes	1.1029 minutes
Stnd Dev Btwn Labs	0.1061 minutes	0.0985 minutes

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

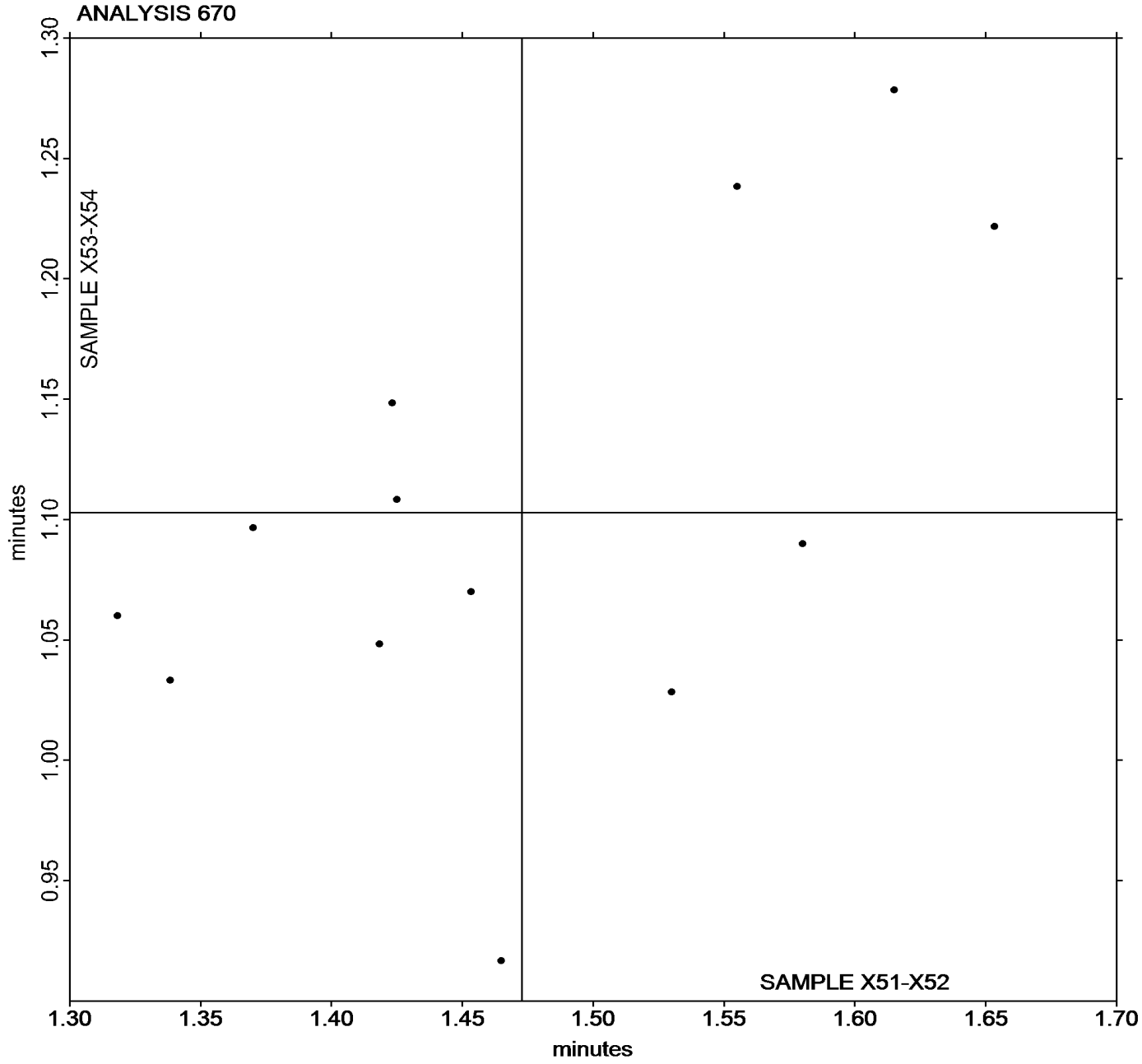
Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **X51** = 1.4727 minutes

Grand Mean Sample **X52** = 1.1029 minutes



Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		4.073	-0.011	-0.07	3.712	-0.106	-0.80	ZZ
4RFPUM		3.937	-0.148	-0.91	3.600	-0.217	-1.64	ZZ
7MFKQT		3.737	-0.348	-2.15	3.645	-0.172	-1.30	ZZ
E4E67U		3.833	-0.251	-1.55	3.840	0.023	0.17	ZZ
G7UGXV		4.240	0.155	0.96	3.920	0.103	0.77	ZZ
K4UHBT		4.198	0.114	0.70	3.840	0.023	0.17	ZZ
KCMPUX		4.098	0.014	0.08	3.847	0.029	0.22	ZZ
KLVJNQ		4.120	0.035	0.22	3.953	0.136	1.02	ZZ
KPUXCF		4.195	0.110	0.68	3.738	-0.079	-0.59	ZZ
LDHVNX		4.283	0.199	1.23	3.997	0.179	1.35	ZZ
LHCMXF		4.220	0.135	0.83	4.028	0.211	1.59	ZZ
NLYBA3		4.097	0.012	0.07	3.727	-0.091	-0.68	ZZ
X3G4BD		4.070	-0.015	-0.09	3.778	-0.039	-0.29	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	4.0847 minutes	3.8173 minutes
Stnd Dev Btwn Labs	0.1620 minutes	0.1328 minutes

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

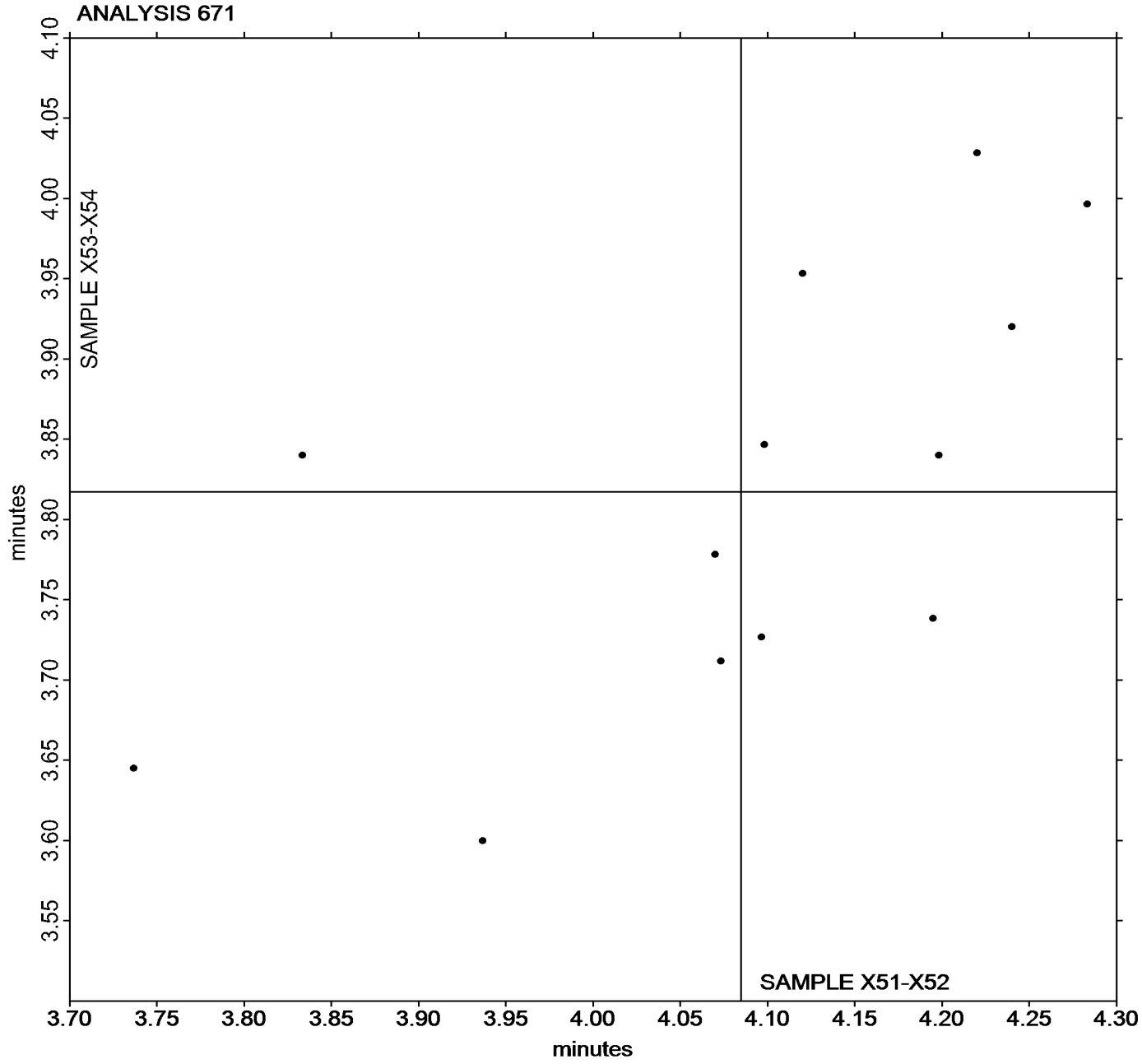
Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **X51** = 4.0847 minutes

Grand Mean Sample **X52** = 3.8173 minutes



Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		14.71	0.23	0.45	8.348	-0.433	-0.44	ZZ
4RFPUM		14.20	-0.29	-0.57	8.123	-0.658	-0.66	ZZ
7MFKQT		13.95	-0.53	-1.06	8.200	-0.581	-0.58	ZZ
E4E67U	*	14.40	-0.09	-0.18	11.765	2.984	3.00	ZZ
G7UGXV		14.53	0.04	0.09	8.462	-0.319	-0.32	ZZ
K4UHBT		15.64	1.16	2.29	7.970	-0.811	-0.82	ZZ
KCMPUX		14.41	-0.08	-0.16	8.433	-0.348	-0.35	ZZ
KLVJNQ		13.77	-0.72	-1.42	8.398	-0.383	-0.39	ZZ
KPUXCF		14.48	0.00	-0.01	9.650	0.869	0.87	ZZ
LDHVNX		14.16	-0.33	-0.65	8.510	-0.271	-0.27	ZZ
LHCMXF		14.92	0.43	0.86	8.937	0.156	0.16	ZZ
NLYBA3		15.06	0.57	1.14	8.902	0.121	0.12	ZZ
X3G4BD		14.10	-0.39	-0.76	8.457	-0.324	-0.33	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	14.486 minutes	8.7812 minutes
Stnd Dev Btwn Labs	0.505 minutes	0.9942 minutes

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

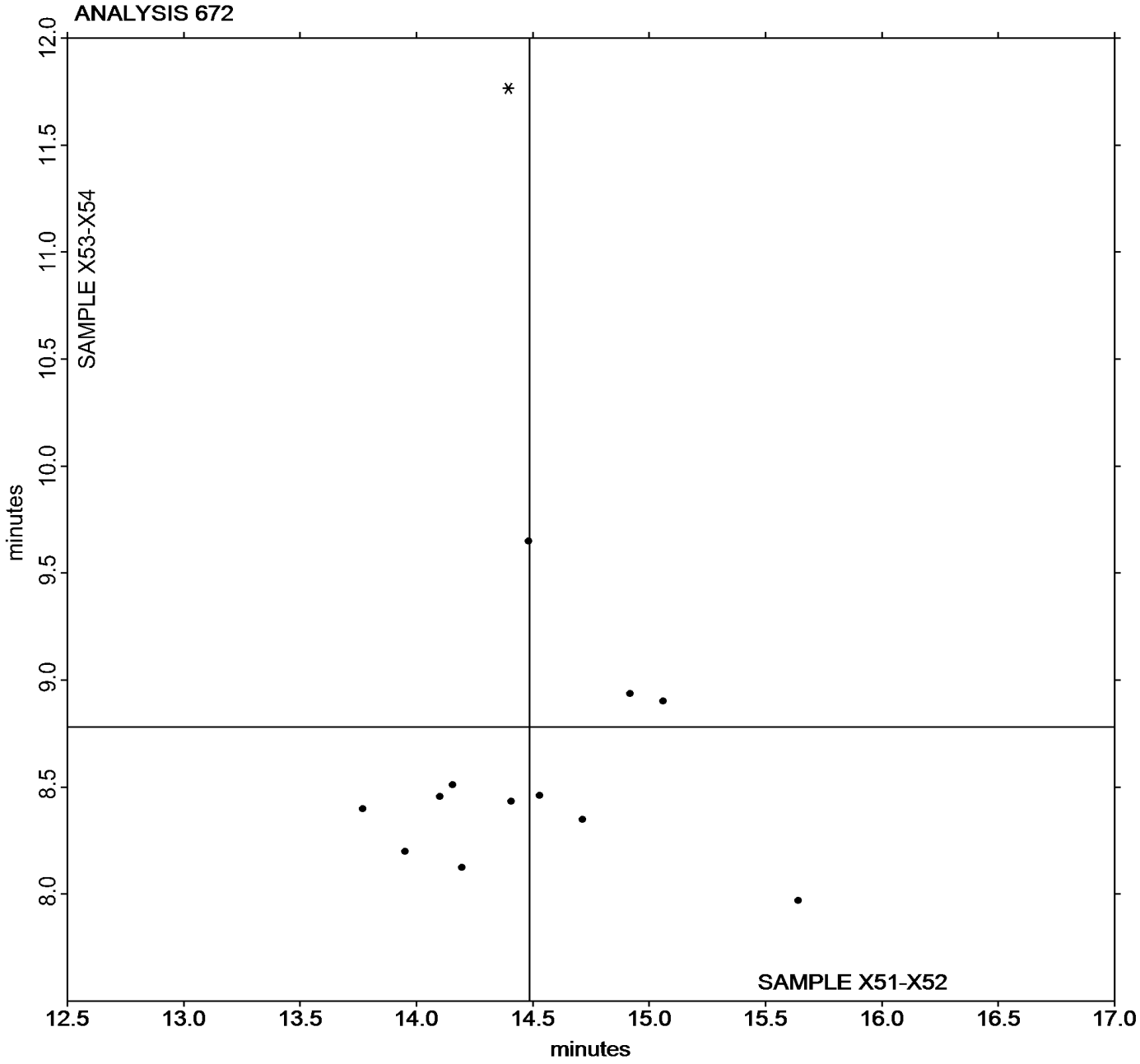
Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **X51** = 14.486 minutes

Grand Mean Sample **X52** = 8.7812 minutes



Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		5.580	0.206	0.54	7.535	-0.408	-0.39	ZZ
4RFPUM		5.213	-0.160	-0.42	7.538	-0.405	-0.39	ZZ
7MFKQT		4.710	-0.664	-1.72	6.677	-1.267	-1.22	ZZ
E4E67U		4.880	-0.494	-1.28	6.858	-1.085	-1.04	ZZ
G7UGXV		5.823	0.450	1.17	7.797	-0.147	-0.14	ZZ
K4UHBT		5.187	-0.187	-0.48	7.573	-0.370	-0.36	ZZ
KCMPUX		5.910	0.536	1.39	9.317	1.373	1.32	ZZ
KLVJNQ		5.440	0.066	0.17	7.943	0.000	0.00	ZZ
KPUXCF		5.500	0.126	0.33	9.167	1.223	1.18	ZZ
LDHVNX		5.403	0.030	0.08	8.112	0.168	0.16	ZZ
LHCMXF		5.210	-0.164	-0.42	7.388	-0.555	-0.53	ZZ
NLYBA3		5.962	0.588	1.53	10.242	2.298	2.21	ZZ
X3G4BD		5.038	-0.335	-0.87	7.115	-0.828	-0.80	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	5.3736 lbf.in	7.9432 lbf.in
Stnd Dev Btwn Labs	0.3855 lbf.in	1.0392 lbf.in

Statistics based on 13 of 13 reporting participants

Summary Statistics in SI Units

	Sample X51	Sample X52
Grand Means	6.0713 dN.m	8.9746 dN.m
Stnd Dev Btwn Labs	0.4356 dN.m	1.1741 dN.m

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

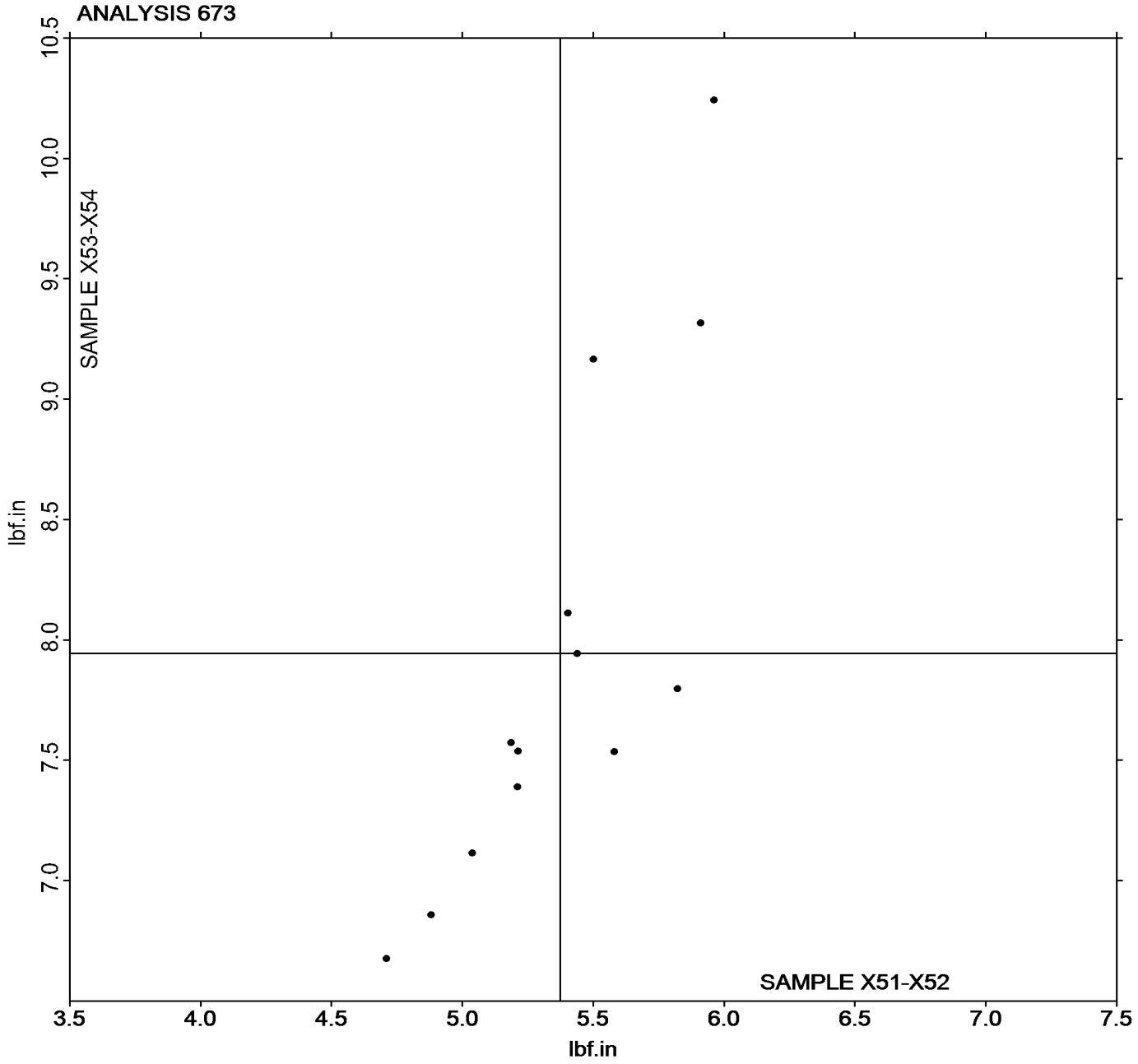
Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **X51** = 5.3736 lbf.in

Grand Mean Sample **X52** = 7.9432 lbf.in



Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample X51 Lab Mean	Sample X51 Diff from Grand Mean	Sample X51 CPV	Sample X52 Lab Mean	Sample X52 Diff from Grand Mean	Sample X52 CPV	Instr Code
42LW82		46.02	4.99	1.71	45.57	4.19	1.81	ZZ
4RFPUM		40.38	-0.64	-0.22	39.61	-1.77	-0.76	ZZ
7MFKQT		38.49	-2.54	-0.87	41.18	-0.20	-0.09	ZZ
E4E67U		40.10	-0.93	-0.32	40.96	-0.42	-0.18	ZZ
G7UGXV		42.05	1.03	0.35	41.26	-0.12	-0.05	ZZ
K4UHBT		46.00	4.98	1.70	46.05	4.67	2.02	ZZ
KCMPUX		35.79	-5.23	-1.79	37.98	-3.40	-1.47	ZZ
KLVJNQ		40.72	-0.30	-0.10	42.01	0.63	0.27	ZZ
KPUXCF		42.40	1.38	0.47	40.95	-0.43	-0.18	ZZ
LDHVNX		39.13	-1.90	-0.65	38.93	-2.45	-1.06	ZZ
LHCMXF		40.22	-0.81	-0.28	41.01	-0.37	-0.16	ZZ
NLYBA3		38.69	-2.34	-0.80	39.95	-1.43	-0.62	ZZ
X3G4BD		43.31	2.29	0.78	42.48	1.10	0.48	ZZ

Summary Statistics

	Sample X51	Sample X52
Grand Means	41.021 lbf.in	41.377 lbf.in
Stnd Dev Btwn Labs	2.927 lbf.in	2.314 lbf.in

Statistics based on 13 of 13 reporting participants

Summary Statistics in SI Units

	Sample X51	Sample X52
Grand Means	46.348 dN.m	46.750 dN.m
Stnd Dev Btwn Labs	3.307 dN.m	2.614 dN.m

Statistics based on 13 of 13 reporting participants

Samples X51-X52: EPDM compound #1 & X53-X54: EPDM compound #2

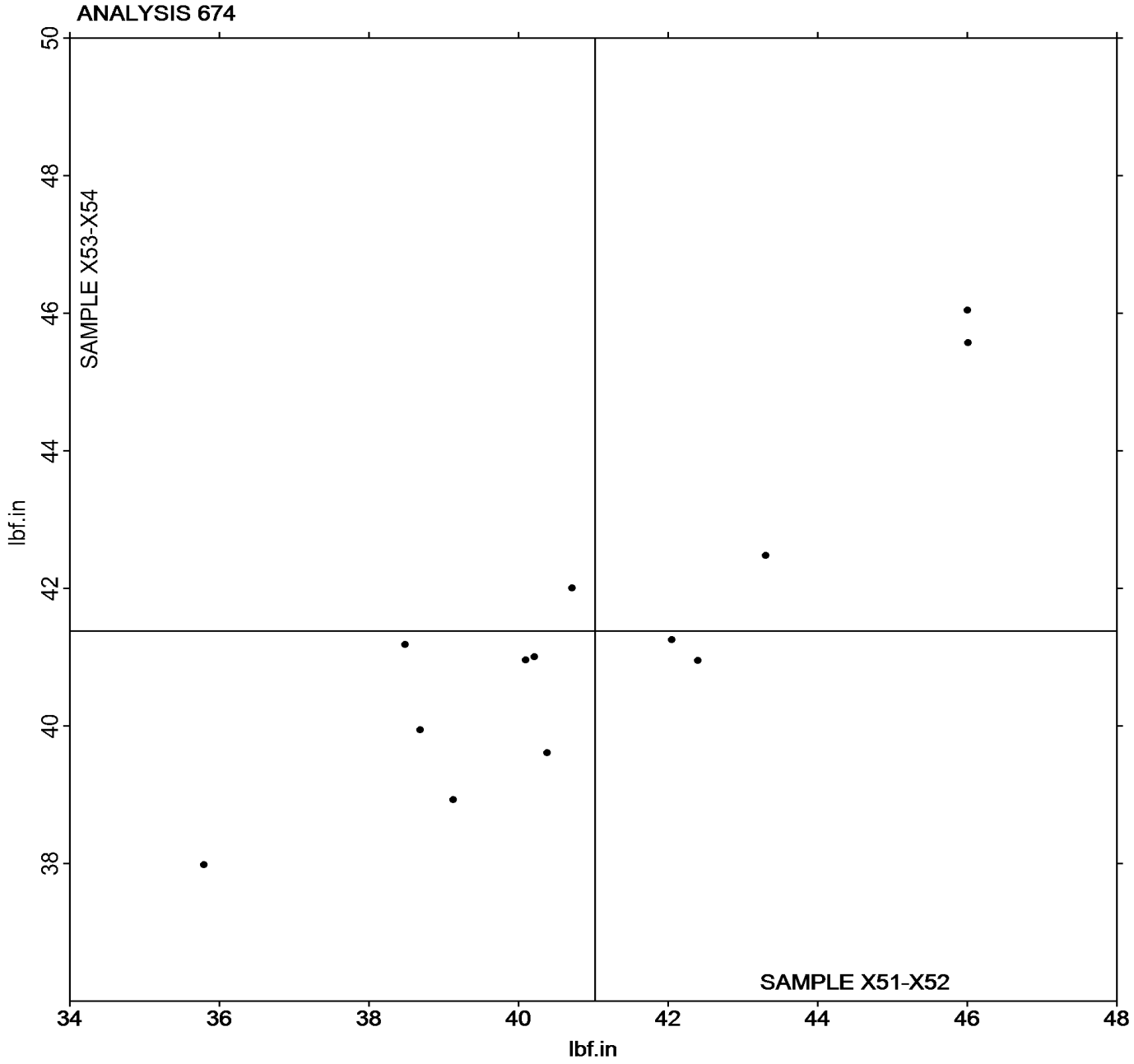
Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **X51** = 41.021 lbf.in

Grand Mean Sample **X52** = 41.377 lbf.in



Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		0.9817	0.0237	0.25	0.8100	-0.1681	-1.92	MC
4RFPUM		0.8950	-0.0630	-0.66	1.0733	0.0952	1.09	MC
7MFKQT		0.9983	0.0403	0.42	0.9817	0.0036	0.04	MC
878PVD		1.0417	0.0837	0.88	1.0550	0.0769	0.88	MC
8EGCMD		0.7433	-0.2147	-2.25	0.9200	-0.0581	-0.66	MC
8TX83A		1.0100	0.0520	0.55	1.0250	0.0469	0.54	MC
94BULA		0.9583	0.0003	0.00	1.0267	0.0486	0.55	MC
9YGXX4		1.0317	0.0737	0.77	1.0083	0.0302	0.35	MC
AHBQLM		0.9667	0.0087	0.09	1.0361	0.0580	0.66	MC
DT3FW6		1.0633	0.1053	1.10	0.9683	-0.0098	-0.11	MC
E3KEZF		0.9567	-0.0013	-0.01	1.0017	0.0236	0.27	MC
EGGVPD	X	0.8267	-0.1313	-1.38	0.6250	-0.3531	-4.03	MC
F6MY47	*	0.7483	-0.2097	-2.20	1.1500	0.1719	1.96	MC
F93AEP		0.9667	0.0087	0.09	1.0017	0.0236	0.27	MD
GNUNU9		0.9033	-0.0547	-0.57	0.8050	-0.1731	-1.98	XX
GQ693H		1.0150	0.0570	0.60	0.9900	0.0119	0.14	MC
HDAE8Z		1.0267	0.0687	0.72	0.9683	-0.0098	-0.11	MC
J6C7XT		0.8633	-0.0947	-0.99	0.8483	-0.1298	-1.48	MD
J6D49P		1.0117	0.0537	0.56	0.9417	-0.0364	-0.42	MC
K3ZR7D		0.8500	-0.1080	-1.13	1.0100	0.0319	0.36	TP
LDHVNX		0.9817	0.0237	0.25	1.0183	0.0402	0.46	MC
LXLDYY		1.0100	0.0520	0.55	1.0583	0.0802	0.92	MD
MNUFP6		1.0150	0.0570	0.60	0.9517	-0.0264	-0.30	XX
RADB66		0.9967	0.0387	0.41	1.1000	0.1219	1.39	MC
TX33ZR		1.0683	0.1103	1.16	0.8350	-0.1431	-1.63	MC
VEXCYE		0.7700	-0.1880	-1.97	1.0517	0.0736	0.84	MC
WGJDFM		1.0433	0.0853	0.89	1.0300	0.0519	0.59	MC
X3G4BD		1.0800	0.1220	1.28	0.9267	-0.0514	-0.59	MC
XQHQTR		0.8167	-0.1413	-1.48	0.9467	-0.0314	-0.36	MC
Y4PX74		0.9683	0.0103	0.11	0.8250	-0.1531	-1.75	MC
ZA8QWU	X	0.4833	-0.4747	-4.98	1.0633	0.0852	0.97	MC

Summary Statistics

	Sample X55	Sample X56
Grand Means	0.95799 minutes	0.97809 minutes
Stnd Dev Btwn Labs	0.09540 minutes	0.08760 minutes

Statistics based on 29 of 31 reporting participants

Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #684

EGGVPD (X) - Data for Sample group X57-X58 are low. Inconsistency in testing within Sample group X57-X58.

ZA8QWU (X) - Data for Sample group X55-X56 are low.

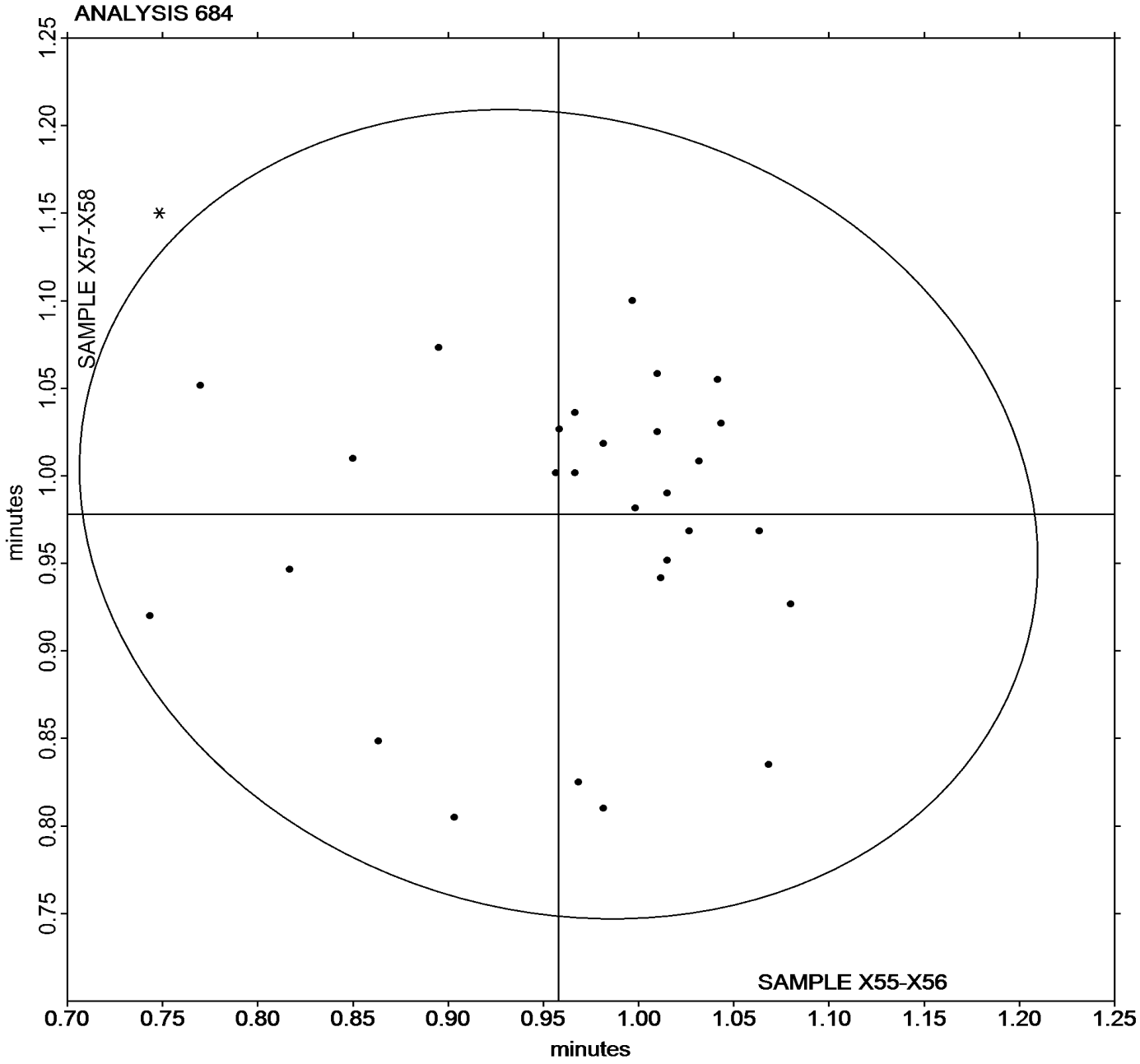
Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **X55** = 0.95799 minutes

Grand Mean Sample **X56** = 0.97809 minutes



Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		0.7950	0.0060	0.08	0.7283	-0.2539	-1.80	MC
4RFPUM		0.7633	-0.0257	-0.34	1.1017	0.1195	0.85	MC
7MFKQT		0.8517	0.0626	0.83	0.9883	0.0061	0.04	MC
878PVD		0.9083	0.1193	1.58	1.1067	0.1245	0.88	MC
8EGCMD		0.6060	-0.1830	-2.43	0.9268	-0.0554	-0.39	MC
8TX83A		0.8283	0.0393	0.52	1.0267	0.0445	0.32	MC
94BULA		0.8100	0.0210	0.28	1.0450	0.0628	0.45	MC
9YGXX4		0.8000	0.0110	0.15	0.9817	-0.0005	0.00	MC
AHBQLM		0.8306	0.0415	0.55	1.0750	0.0928	0.66	MC
C6VHXL		0.6883	-0.1007	-1.34	0.9167	-0.0655	-0.47	MC
DT3FW6		0.8800	0.0910	1.21	0.9867	0.0045	0.03	MC
E3KEZF		0.7817	-0.0074	-0.10	0.9967	0.0145	0.10	MC
EGGVPD		0.6917	-0.0974	-1.29	0.6683	-0.3139	-2.23	MC
F6MY47	*	0.6800	-0.1090	-1.45	1.3033	0.3211	2.28	MC
F93AEP		0.7933	0.0043	0.06	1.0083	0.0261	0.19	MD
GNUNU9		0.7700	-0.0190	-0.25	0.7933	-0.1889	-1.34	XX
GQ693H		0.8500	0.0610	0.81	0.9850	0.0028	0.02	MC
HDAE8Z		0.8483	0.0593	0.79	0.9583	-0.0239	-0.17	MC
J6C7XT		0.7100	-0.0790	-1.05	0.7550	-0.2272	-1.61	MD
J6D49P		0.8250	0.0360	0.48	0.9100	-0.0722	-0.51	MC
K3ZR7D		0.7283	-0.0607	-0.80	1.0667	0.0845	0.60	TP
LDHVNX		0.7967	0.0076	0.10	1.0217	0.0395	0.28	MC
LXLDYY		0.8517	0.0626	0.83	1.0817	0.0995	0.71	MD
M2K9YD		0.7483	-0.0407	-0.54	1.1267	0.1445	1.03	MC
MNUFP6		0.7300	-0.0590	-0.78	0.9083	-0.0739	-0.52	XX
RADB66		0.8917	0.1026	1.36	1.1983	0.2161	1.54	MC
TX33ZR		0.8783	0.0893	1.18	0.8000	-0.1822	-1.29	MC
U9EPQ6		0.7850	-0.0040	-0.05	1.0817	0.0995	0.71	MC
VEXCYE		0.6783	-0.1107	-1.47	1.1183	0.1361	0.97	MC
WGJDFM		0.8767	0.0876	1.16	1.0533	0.0711	0.51	MC
X3G4BD		0.8950	0.1060	1.41	0.9083	-0.0739	-0.52	MC
XQHQTR		0.7417	-0.0474	-0.63	1.0067	0.0245	0.17	MC
Y4PX74		0.8683	0.0793	1.05	0.7833	-0.1989	-1.41	MC
ZA8QWU		0.6967	-0.0924	-1.22	1.1500	0.1678	1.19	MC
ZHKFV3		0.7378	-0.0512	-0.68	0.8097	-0.1725	-1.23	MC

Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Summary Statistics

Grand Means	0.78903 minutes	0.98219 minutes
Stnd Dev Btwn Labs	0.07541 minutes	0.14076 minutes

Statistics based on 35 of 35 reporting participants

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

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

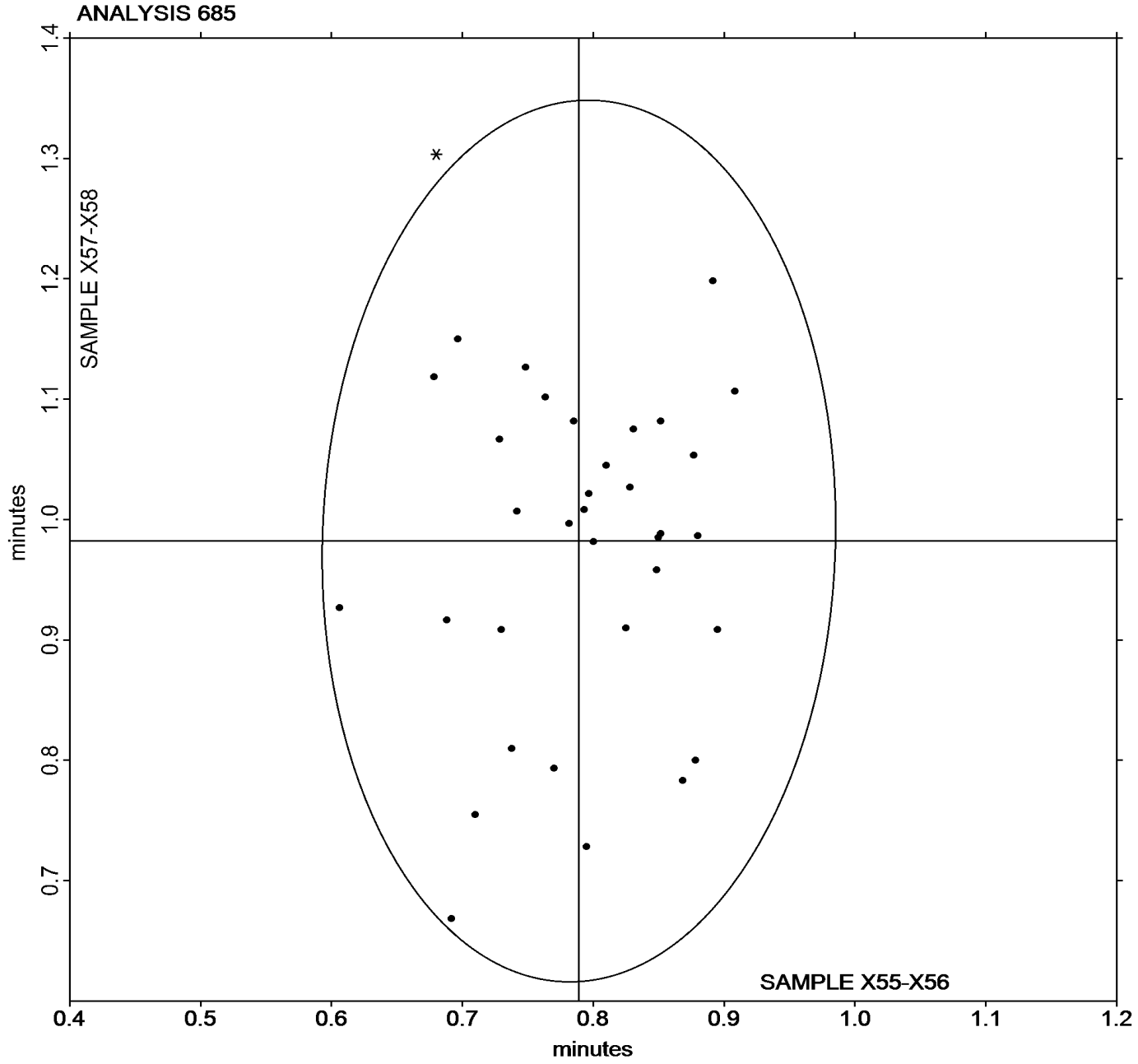
Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **X55** = 0.78903 minutes

Grand Mean Sample **X56** = 0.98219 minutes



Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		3.370	0.154	0.81	2.143	-0.019	-0.19	MC
4RFPUM		3.180	-0.036	-0.19	2.182	0.020	0.20	MC
7MFKQT		3.243	0.027	0.14	2.173	0.011	0.12	MC
878PVD		3.397	0.181	0.95	2.252	0.090	0.93	MC
8EGCMD		2.797	-0.419	-2.22	2.060	-0.102	-1.05	MC
8TX83A		3.298	0.082	0.43	2.252	0.090	0.93	MC
94BULA		3.283	0.067	0.36	2.157	-0.005	-0.05	MC
9YGXX4		3.265	0.049	0.26	2.193	0.031	0.32	MC
AHBQLM		3.292	0.076	0.40	2.194	0.033	0.34	MC
C6VHXL		3.142	-0.074	-0.39	2.188	0.026	0.27	MC
DT3FW6		3.393	0.177	0.94	2.188	0.026	0.27	MC
E3KEZF		3.247	0.031	0.16	2.253	0.091	0.95	MC
EGGVPD		2.783	-0.433	-2.29	1.935	-0.227	-2.35	MC
F6MY47	X	2.758	-0.458	-2.42	2.280	0.118	1.22	MC
F93AEP		3.173	-0.043	-0.23	2.145	-0.017	-0.18	MD
GNUNU9		3.058	-0.158	-0.83	2.057	-0.105	-1.09	XX
GQ693H		3.260	0.044	0.23	2.200	0.038	0.39	MC
HDAE8Z		3.398	0.182	0.96	2.155	-0.007	-0.07	MC
J6C7XT	*	2.828	-0.388	-2.05	1.873	-0.289	-2.98	MD
J6D49P		3.395	0.179	0.95	2.237	0.075	0.77	MC
K3ZR7D		3.245	0.029	0.15	2.157	-0.005	-0.05	TP
LDHVNX		3.280	0.064	0.34	2.237	0.075	0.77	MC
LXLDYY		3.413	0.197	1.04	2.298	0.136	1.41	MD
M2K9YD		3.188	-0.028	-0.15	2.248	0.086	0.89	MC
MNUFP6		2.905	-0.311	-1.65	1.992	-0.170	-1.76	MC
RADB66		3.533	0.317	1.68	2.193	0.031	0.32	MC
TX33ZR		3.440	0.224	1.18	2.205	0.043	0.45	MC
U9EPQ6		3.218	0.002	0.01	2.210	0.048	0.50	MC
VEXCYE		3.007	-0.209	-1.11	2.177	0.015	0.15	MC
WGJDFM		3.387	0.171	0.90	2.243	0.081	0.84	MC
X3G4BD		3.383	0.167	0.88	2.288	0.126	1.31	MC
XQHQTR		3.155	-0.061	-0.32	2.062	-0.100	-1.04	MC
Y4PX74		3.098	-0.118	-0.62	2.030	-0.132	-1.36	MC
ZA8QWU		3.012	-0.204	-1.08	2.160	-0.002	-0.02	MC
ZHKFV3		3.280	0.064	0.34	2.168	0.006	0.06	MC

Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Summary Statistics

Grand Means	3.2161 minutes	2.1619 minutes
Stnd Dev Btwn Labs	0.1891 minutes	0.0967 minutes

Statistics based on 34 of 35 reporting participants

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #686

F6MY47 (X) - Inconsistency in testing between Sample groups.

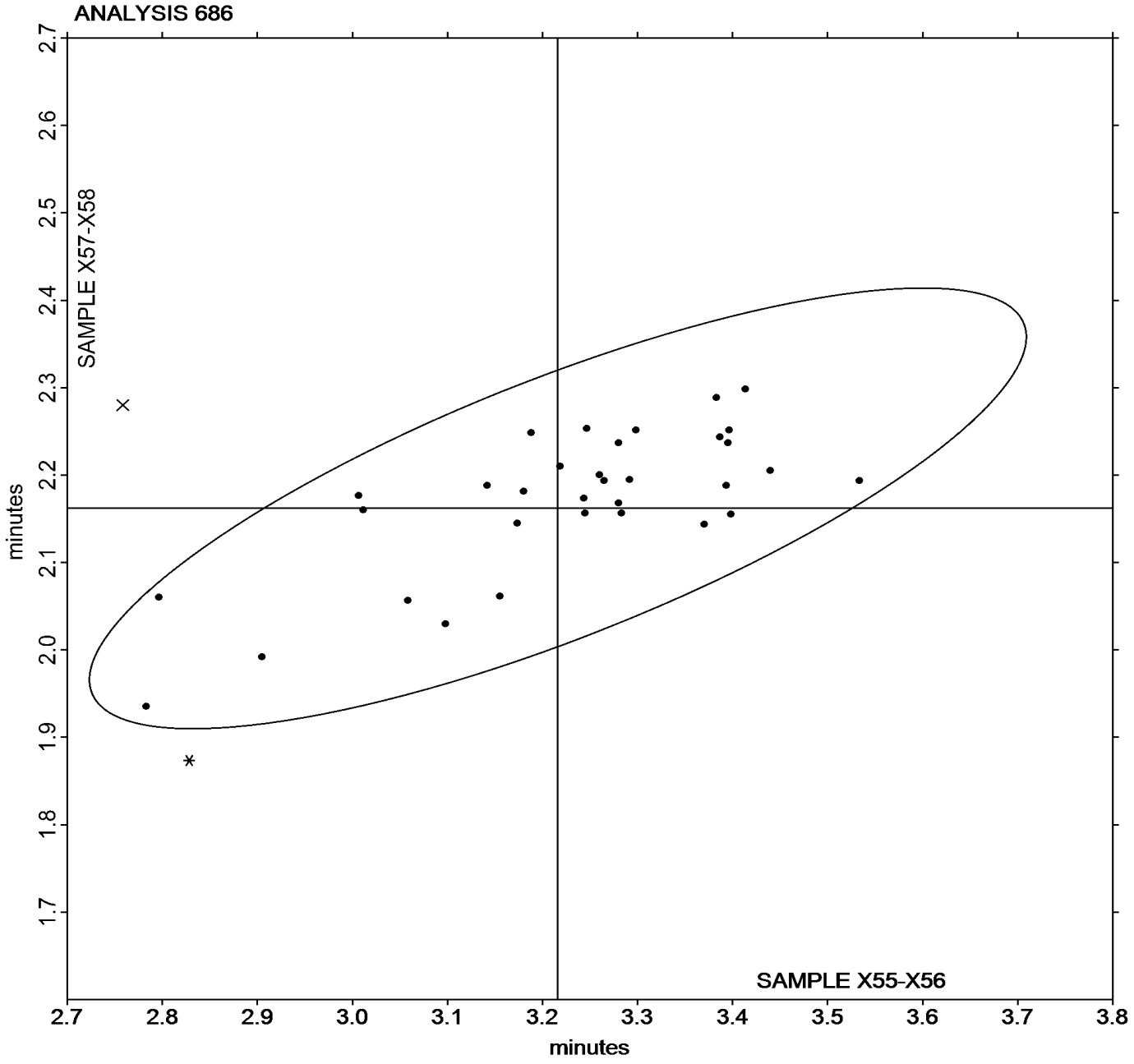
Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **X55** = 3.2161 minutes

Grand Mean Sample **X56** = 2.1619 minutes



Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		6.590	0.204	0.63	4.702	-0.190	-0.70	MC
4RFPUM		6.397	0.011	0.03	4.955	0.064	0.24	MC
7MFKQT		6.383	-0.002	-0.01	4.740	-0.151	-0.56	MC
878PVD		6.577	0.191	0.59	5.060	0.169	0.62	MC
8EGCMD		5.876	-0.510	-1.58	4.924	0.033	0.12	MC
8TX83A		6.488	0.103	0.32	4.948	0.057	0.21	MC
94BULA		6.352	-0.034	-0.11	4.655	-0.236	-0.87	MC
9YGXX4		6.427	0.041	0.13	4.622	-0.270	-1.00	MC
AHBQLM		6.453	0.067	0.21	4.795	-0.097	-0.36	MC
C6VHXL		6.262	-0.124	-0.38	5.000	0.109	0.40	MP
DT3FW6		6.665	0.279	0.87	4.950	0.059	0.22	MC
E3KEZF		6.592	0.206	0.64	5.308	0.417	1.54	MC
EGGVPD		5.677	-0.709	-2.20	4.808	-0.083	-0.31	MC
F6MY47	*	6.397	0.011	0.03	5.702	0.810	3.00	MC
F93AEP		6.327	-0.059	-0.18	4.735	-0.156	-0.58	MD
GNUNU9		6.200	-0.186	-0.58	4.825	-0.066	-0.25	XX
GQ693H		6.450	0.064	0.20	4.985	0.094	0.35	MC
HDAE8Z		6.513	0.128	0.40	4.883	-0.008	-0.03	XX
J6C7XT	*	5.505	-0.881	-2.73	4.143	-0.748	-2.76	MD
J6D49P		6.588	0.203	0.63	4.837	-0.055	-0.20	MC
K3ZR7D		6.277	-0.109	-0.34	4.708	-0.183	-0.68	TP
LDHVNX		6.587	0.201	0.62	4.873	-0.018	-0.07	MC
LXLDYY		6.785	0.399	1.24	5.297	0.405	1.50	MD
M2K9YD		6.663	0.278	0.86	5.150	0.259	0.96	MC
MNUFP6		5.788	-0.597	-1.85	4.315	-0.576	-2.13	XX
RADB66		6.930	0.544	1.69	4.752	-0.140	-0.52	MC
TX33ZR		6.893	0.508	1.57	4.813	-0.078	-0.29	MC
U9EPQ6		6.578	0.193	0.60	4.905	0.014	0.05	MC
VEXCYE		6.208	-0.177	-0.55	5.130	0.239	0.88	MC
WGJDFM		6.577	0.191	0.59	4.850	-0.041	-0.15	MC
X3G4BD		6.755	0.369	1.14	5.025	0.134	0.49	MC
XQHQTR		6.147	-0.239	-0.74	4.830	-0.061	-0.23	MC
Y4PX74		6.115	-0.271	-0.84	4.778	-0.113	-0.42	MC
ZA8QWU		6.072	-0.314	-0.97	5.130	0.239	0.88	MC
ZHKFV3		6.411	0.026	0.08	5.063	0.172	0.63	MC

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Summary Statistics

Grand Means		
	6.3858 minutes	4.8913 minutes
Stnd Dev Btwn Labs		
	0.3227 minutes	0.2706 minutes

Statistics based on 35 of 35 reporting participants

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

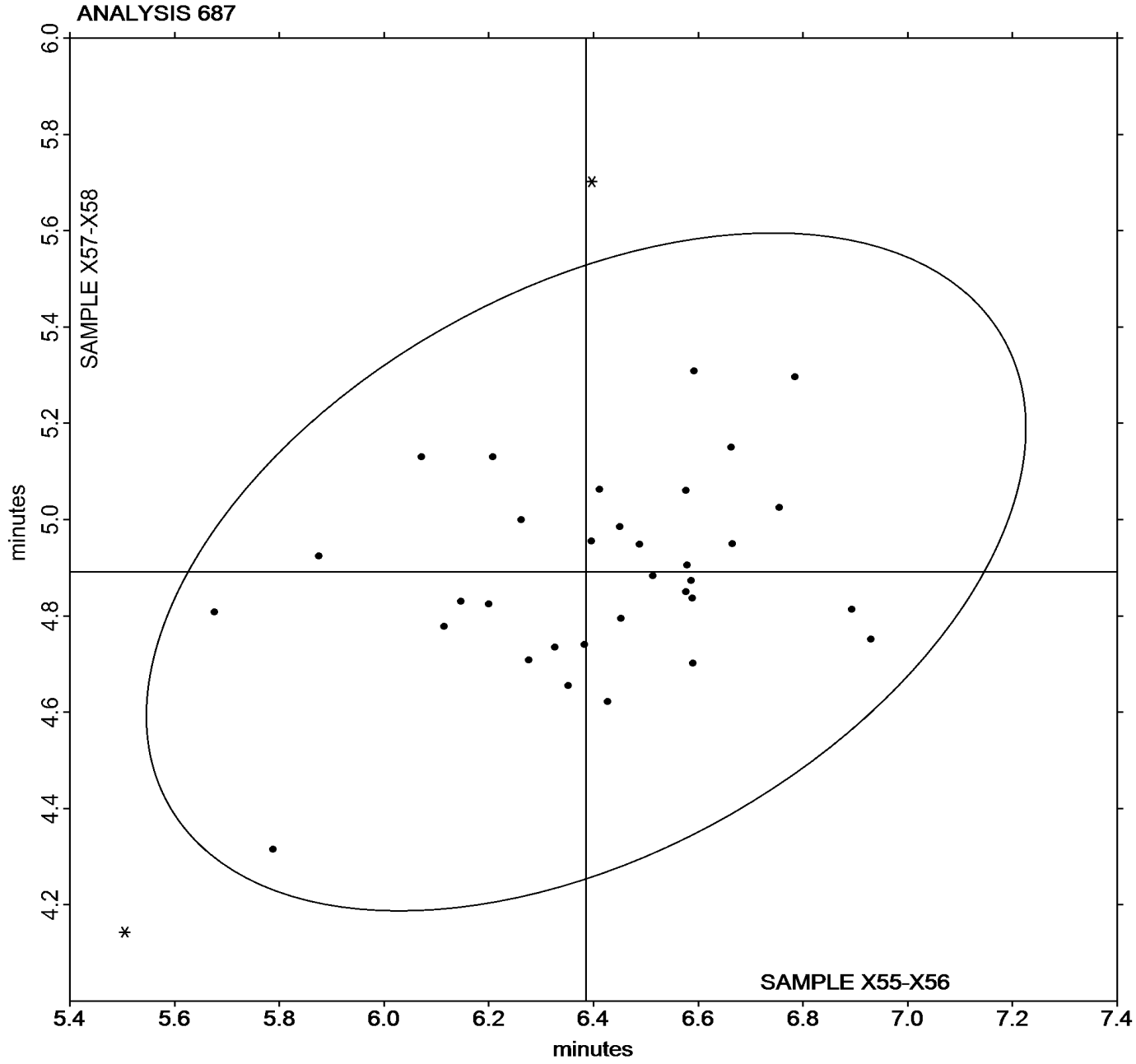
Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **X55** = 6.3858 minutes

Grand Mean Sample **X56** = 4.8913 minutes



Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		2.213	0.119	0.65	6.582	0.049	0.06	MC
4RFPUM		1.953	-0.141	-0.77	7.352	0.819	1.05	MC
7MFKQT		2.035	-0.060	-0.33	6.112	-0.421	-0.54	MC
878PVD		1.873	-0.221	-1.21	6.287	-0.246	-0.31	MC
8EGCMD		2.409	0.314	1.72	6.604	0.072	0.09	MC
8TX83A		2.088	-0.006	-0.04	6.550	0.018	0.02	MC
94BULA		2.100	0.005	0.03	6.603	0.071	0.09	MC
9YGXX4		2.000	-0.095	-0.52	6.055	-0.477	-0.61	MC
AHBQLM		2.033	-0.061	-0.34	6.738	0.206	0.26	MC
C6VHXL		2.314	0.220	1.20	6.989	0.457	0.59	MP
DT3FW6		2.000	-0.095	-0.52	5.532	-1.001	-1.28	MC
E3KEZF		2.160	0.065	0.36	6.118	-0.414	-0.53	MC
EGGVPD	*	2.267	0.172	0.94	5.032	-1.501	-1.92	MC
F6MY47	X	3.695	1.600	8.76	8.048	1.516	1.94	MC
F93AEP		2.006	-0.089	-0.49	6.759	0.226	0.29	MD
GNUNU9		2.242	0.147	0.80	6.217	-0.316	-0.40	XX
GQ693H		1.978	-0.117	-0.64	5.934	-0.598	-0.77	MC
HDAE8Z		2.067	-0.028	-0.15	6.137	-0.396	-0.51	MC
J6C7XT		1.959	-0.136	-0.74	6.238	-0.294	-0.38	MD
J6D49P		2.080	-0.015	-0.08	5.978	-0.554	-0.71	MC
K3ZR7D		2.250	0.155	0.85	7.443	0.911	1.17	TP
LDHVNX		2.058	-0.036	-0.20	6.278	-0.254	-0.33	MC
LXLDYY		1.919	-0.176	-0.96	6.735	0.203	0.26	MD
M2K9YD		2.272	0.177	0.97	7.720	1.188	1.52	MC
MNUFP6		1.957	-0.137	-0.75	6.280	-0.253	-0.32	XX
RADB66		1.992	-0.103	-0.56	6.982	0.449	0.58	MC
TX33ZR		2.047	-0.048	-0.26	5.762	-0.771	-0.99	MC
U9EPQ6		2.155	0.060	0.33	7.325	0.793	1.02	MC
VEXCYE	*	2.575	0.480	2.63	8.242	1.709	2.19	MC
WGJDFM		1.968	-0.126	-0.69	5.693	-0.839	-1.07	MC
X3G4BD		1.987	-0.108	-0.59	5.372	-1.161	-1.49	MC
XQHQTR		2.220	0.125	0.69	7.150	0.618	0.79	MC
Y4PX74	*	1.577	-0.518	-2.84	6.655	0.123	0.16	MC
ZA8QWU	*	2.385	0.290	1.59	8.698	2.166	2.77	MC
ZHKFV3		2.083	-0.012	-0.07	5.948	-0.585	-0.75	MC

Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Summary Statistics

Grand Means	2.0948 lbf.in	6.5323 lbf.in
Stnd Dev Btwn Labs	0.1827 lbf.in	0.7808 lbf.in

Statistics based on 34 of 35 reporting participants

Summary Statistics in SI Units

Grand Means	2.3668 dN.m	7.3805 dN.m
Stnd Dev Btwn Labs	0.2064 dN.m	0.8822 dN.m

Statistics based on 34 of 35 reporting participants

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #688

F6MY47 (X) - Data for Sample group X55-X56 are high. Inconsistency in testing within Sample group X57-X58.

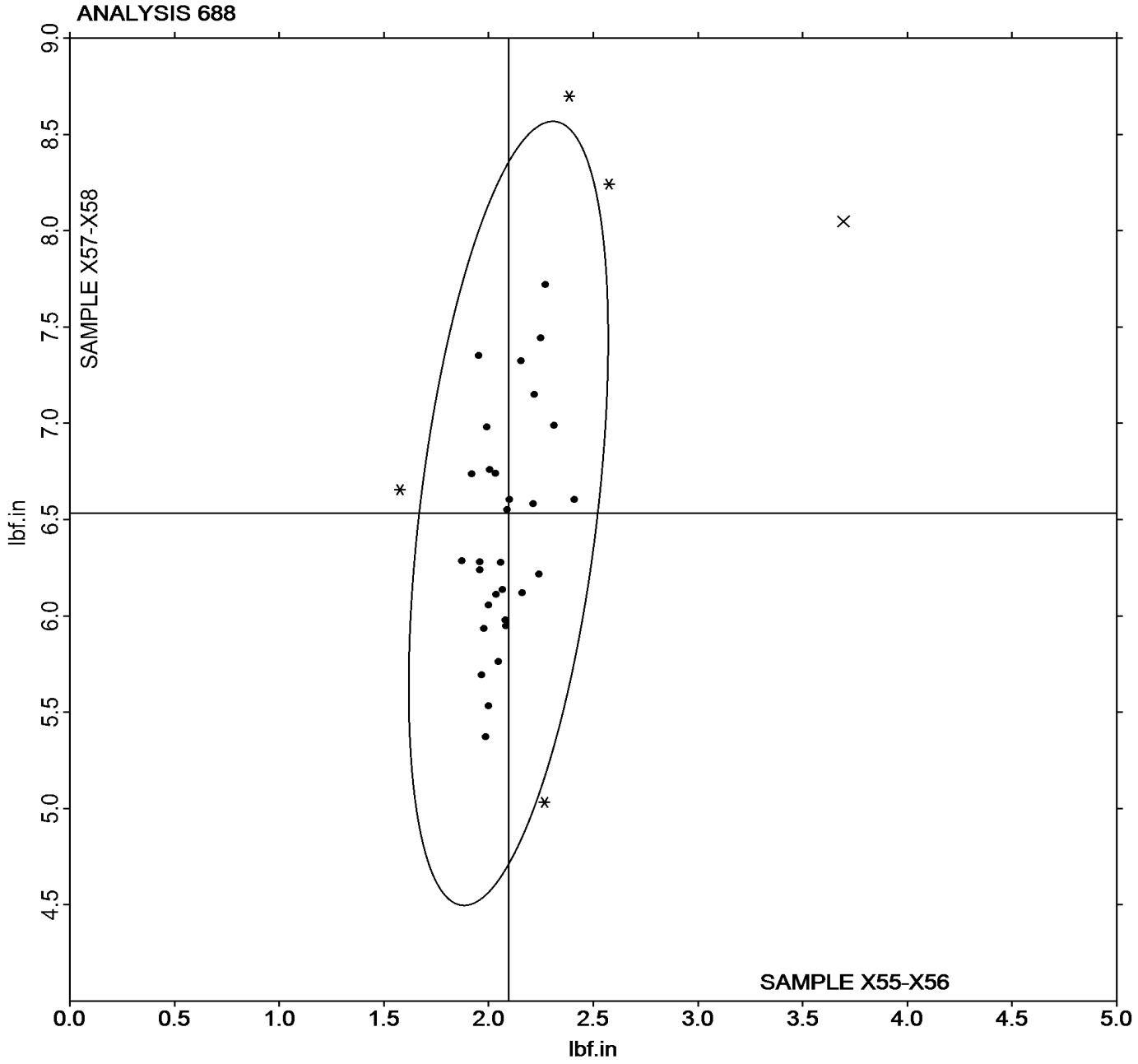
Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **X55** = 2.0948 lbf.in

Grand Mean Sample **X56** = 6.5323 lbf.in



Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample X55 Lab Mean	Sample X55 Diff from Grand Mean	Sample X55 CPV	Sample X56 Lab Mean	Sample X56 Diff from Grand Mean	Sample X56 CPV	Instr Code
42LW82		16.34	0.76	0.98	17.45	1.19	1.57	MC
4RFPUM		14.87	-0.71	-0.91	16.59	0.33	0.43	MC
7MFKQT		15.23	-0.35	-0.44	15.95	-0.31	-0.41	MC
878PVD		14.45	-1.13	-1.45	15.07	-1.19	-1.56	MC
8EGCMD		14.75	-0.83	-1.06	15.27	-0.99	-1.30	MC
8TX83A		16.21	0.64	0.82	16.48	0.22	0.29	MC
94BULA		15.41	-0.16	-0.21	16.09	-0.17	-0.22	MC
9YGXX4		15.89	0.32	0.41	15.84	-0.42	-0.55	MC
AHBQLM		15.19	-0.39	-0.50	15.97	-0.29	-0.38	MC
C6VHXL		16.61	1.04	1.33	17.95	1.69	2.22	MP
DT3FW6		16.00	0.42	0.54	16.33	0.07	0.10	MC
E3KEZF		16.14	0.56	0.73	16.28	0.02	0.03	MC
EGGVPD	X	13.96	-1.61	-2.07	13.08	-3.18	-4.18	MC
F6MY47		15.22	-0.36	-0.46	14.53	-1.73	-2.27	MC
F93AEP		16.34	0.77	0.99	17.04	0.78	1.02	MD
GNUNU9		15.66	0.09	0.11	16.49	0.23	0.30	XX
GQ693H		15.47	-0.10	-0.13	16.23	-0.03	-0.03	MC
HDAE8Z		15.76	0.19	0.24	16.33	0.07	0.09	MC
J6C7XT		16.00	0.43	0.55	17.30	1.04	1.37	MD
J6D49P		16.20	0.62	0.80	16.69	0.43	0.56	MC
K3ZR7D		15.27	-0.31	-0.39	16.01	-0.25	-0.33	TP
LDHVNX		16.22	0.64	0.83	16.11	-0.15	-0.19	MC
LXLDYY		15.20	-0.38	-0.48	16.24	-0.02	-0.03	MD
M2K9YD		14.62	-0.95	-1.23	16.51	0.25	0.33	MC
MNUFP6	*	17.57	2.00	2.57	16.35	0.09	0.12	XX
RADB66		13.97	-1.60	-2.06	14.66	-1.60	-2.10	MC
TX33ZR		15.89	0.31	0.40	16.50	0.24	0.31	MC
U9EPQ6		16.56	0.98	1.27	16.71	0.45	0.59	MC
VEXCYE		14.96	-0.61	-0.79	16.72	0.46	0.60	MC
WGJDFM		15.49	-0.08	-0.10	15.18	-1.08	-1.41	MC
X3G4BD		15.92	0.34	0.44	15.83	-0.43	-0.57	MC
XQHQTR		13.98	-1.59	-2.05	15.80	-0.46	-0.61	MC
Y4PX74	X	13.89	-1.68	-2.16	17.77	1.51	1.99	MC
ZA8QWU		14.98	-0.60	-0.77	17.51	1.25	1.64	MC
ZHKFV3		15.60	0.03	0.04	16.56	0.31	0.40	MC

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Summary Statistics

Grand Means	15.573 lbf.in	16.258 lbf.in
Stnd Dev Btwn Labs	0.777 lbf.in	0.761 lbf.in

Statistics based on 33 of 35 reporting participants

Summary Statistics in SI Units

Grand Means	17.596 dN.m	18.370 dN.m
Stnd Dev Btwn Labs	0.878 dN.m	0.860 dN.m

Statistics based on 33 of 35 reporting participants

Samples X55-X56: EPDM compound, batch #1 & X57-X58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #689

EGGVPD (X) - Data for Sample group X57-X58 are high.

Y4PX74 (X) - Inconsistency in testing between Sample groups. Inconsistency in testing within Sample group X55-X56.

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **X55** = 15.573 lbf.in

Grand Mean Sample **X56** = 16.258 lbf.in