Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #159- 1st Qtr 09

About the Rubber Program, About CTS

Key for Web Summary Report

Analysis	Analysis Name
605	Tensile Strength: Precured Rubber Samples
606	Ultimate Elongation: Precured Rubber Samples
607	Stress at 300% Elongation: Precured Samples
608	Stress at 100% Elongation: Precured Samples
620	Hardness (Type A): Precured Rubber Samples
630	Tensile Strength: Participant-Cured Rubber
631	Ultimate Elongation: Participant-Cured Samples
632	Tensile Stress at 300% Elongation: Lab-Cured
633	Tensile Stress at 100% Elongation: Lab-Cured
660	Mooney Viscosity (4-minute readings)
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662	Mooney Stress Relaxation: t80
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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
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684	MDR Vulcanization Charac.: Cure Time 10%
685	MDR Vulcanization Charac.: Scorch Time, Ts1
686	MDR Vulcanization Charac.: Cure Time 50%
687	MDR Vulcanization Charac.: Cure Time 90%
688	MDR Vulcanization Charac.: Minimum Torque
689	MDR Vulcanization Charac.: MaximumTorque

ABOUT THE PROGRAM

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

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

ABOUT CTS

Founded in 1971, CTS is a privately-owned company that specializes in interlaboratory tests for a wide variety of industrial sectors, including rubber, plastics, fasteners and metals, containerboard, paper and color, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. More than 2400 labs from the U.S., as well as more than 55 countries, currently participate in the CTS programs.

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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)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
11V9WL		3,566.0	217.1	1.17	3,468.0	120.6	0.66	ZZ
187Z3E		3,576.5	227.6	1.22	3,523.0	175.6	0.96	ZZ
1F5JEJ		3,502.5	153.6	0.83	3,573.0	225.6	1.23	ZZ
1VR92J		3,451.9	103.0	0.55	3,480.9	133.6	0.73	ZZ
2B7ZYW		3,181.5	-167.4	-0.90	3,243.5	-103.9	-0.57	ZZ
2VCL92		3,567.5	218.6	1.17	3,589.5	242.1	1.32	ZZ
3H9AZM		3,318.5	-30.4	-0.16	3,256.9	-90.5	-0.50	ZZ
3M3F9H		3,363.5	14.6	0.08	3,390.5	43.1	0.24	ZZ
3M9AHK		3,223.5	-125.4	-0.67	3,177.0	-170.4	-0.93	ZZ
3UP12W		3,075.3	-273.7	-1.47	3,060.0	-287.4	-1.57	ZZ
4J8QAA		3,416.0	67.1	0.36	3,465.0	117.6	0.64	ZZ
5QC7L3		3,461.0	112.1	0.60	3,353.5	6.1	0.03	ZZ
6PVM4C		3,237.0	-111.9	-0.60	3,253.0	-94.4	-0.52	ZZ
6VGWM		3,098.3	-250.6	-1.35	3,148.3	-199.1	-1.09	ZZ
6YZS2L		3,466.4	117.5	0.63	3,459.2	111.8	0.61	ZZ
71146Z		3,315.0	-33.9	-0.18	3,340.0	-7.4	-0.04	ZZ
79JPZK		3,341.0	-7.9	-0.04	3,346.0	-1.4	-0.01	ZZ
7U1A5Y		3,364.0	15.1	0.08	3,268.0	-79.4	-0.43	ZZ
7VKUHZ		3,072.1	-276.8	-1.49	3,115.4	-232.0	-1.27	ZZ
852RXN		3,475.0	126.1	0.68	3,470.5	123.1	0.67	ZZ
8BQU9K		3,447.0	98.1	0.53	3,405.5	58.1	0.32	ZZ
8E16LM		3,348.5	-0.4	0.00	3,326.5	-20.9	-0.11	ZZ
8KBKH6		3,318.5	-30.4	-0.16	3,214.5	-132.9	-0.73	ZZ
9N6VSZ		3,024.5	-324.4	-1.74	2,960.5	-386.9	-2.12	ZZ
9R57FX		3,227.6	-121.4	-0.65	3,241.3	-106.1	-0.58	ZZ
BFNW73		3,403.5	54.6	0.29	3,370.0	22.6	0.12	ZZ
C3HZ28		3,553.7	204.8	1.10	3,544.8	197.4	1.08	ZZ
CBNQM6		3,307.5	-41.4	-0.22	3,298.0	-49.4	-0.27	ZZ
CVR7BH	X	2,503.5	-845.4	-4.54	2,456.0	-891.4	-4.88	ZZ
CXSGTY		3,388.8	39.9	0.21	3,404.8	57.4	0.31	ZZ
D29WHH	*	3,865.3	516.4	2.78	3,814.5	467.1	2.56	ZZ
D5G8A3		3,371.5	22.6	0.12	3,404.5	57.1	0.31	ZZ
EJ2UKH		3,396.3	47.4	0.25	3,451.3	103.9	0.57	ZZ
EXERPJ		3,086.2	-262.7	-1.41	3,066.8	-280.5	-1.53	ZZ
FE8F3T	*	3,435.0	86.1	0.46	3,578.5	231.1	1.26	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
FYJCHJ		3,429.8	80.8	0.43	3,384.9	37.5	0.21	ZZ
G1CCRT		3,149.5	-199.4	-1.07	3,124.1	-223.2	-1.22	ZZ
GFDX8X		3,120.0	-228.9	-1.23	3,135.0	-212.4	-1.16	ZZ
GP4PHW		3,520.5	171.6	0.92	3,537.0	189.6	1.04	ZZ
GSLEUY		3,520.8	171.8	0.92	3,549.8	202.4	1.11	ZZ
H218GL	*	3,099.0	-249.9	-1.34	3,244.5	-102.9	-0.56	ZZ
HNFPQC		3,046.5	-302.4	-1.63	3,068.5	-278.9	-1.53	ZZ
HR911L		3,494.5	145.6	0.78	3,474.5	127.1	0.70	ZZ
HRSWK		3,386.7	37.7	0.20	3,248.9	-98.5	-0.54	ZZ
HS8TGW		3,496.5	147.6	0.79	3,510.0	162.6	0.89	ZZ
J3MJEC		3,377.0	28.1	0.15	3,365.0	17.6	0.10	ZZ
J7CYM6		3,324.0	-24.9	-0.13	3,375.0	27.6	0.15	ZZ
JM4BYN		3,250.3	-98.6	-0.53	3,135.0	-212.4	-1.16	ZZ
JS7KTG		3,113.0	-235.9	-1.27	3,067.0	-280.4	-1.53	ZZ
KH5VWJ		3,483.0	134.1	0.72	3,557.5	210.1	1.15	ZZ
L8FU6D		3,082.0	-266.9	-1.43	3,067.0	-280.4	-1.53	ZZ
LCCHQN		3,224.5	-124.4	-0.67	3,301.5	-45.9	-0.25	ZZ
LDQ1XK		3,752.5	403.6	2.17	3,739.0	391.6	2.14	ZZ
LDWK53		3,509.2	160.3	0.86	3,491.8	144.4	0.79	ZZ
LMFMRC		3,593.0	244.1	1.31	3,578.1	230.7	1.26	ZZ
LPTN9W		3,433.0	84.1	0.45	3,385.5	38.1	0.21	ZZ
LTA3L9		3,381.0	32.1	0.17	3,380.0	32.6	0.18	ZZ
LV3T5H		3,246.5	-102.4	-0.55	3,196.5	-150.9	-0.83	ZZ
LZ4QBQ		3,502.3	153.4	0.82	3,510.6	163.2	0.89	ZZ
MAELSK		3,533.5	184.6	0.99	3,495.5	148.1	0.81	ZZ
MFYW9		3,222.0	-126.9	-0.68	3,116.0	-231.4	-1.27	ZZ
MHZJQL		2,944.0	-404.9	-2.18	3,005.0	-342.4	-1.87	ZZ
MW5PVT		3,127.5	-221.4	-1.19	3,221.5	-125.9	-0.69	ZZ
MYRZN		3,320.5	-28.4	-0.15	3,215.5	-131.9	-0.72	ZZ
N8FWHB		3,385.5	36.6	0.20	3,490.5	143.1	0.78	ZZ
NCCEVH		3,324.8	-24.2	-0.13	3,310.5	-36.9	-0.20	ZZ
NGP1EE		3,407.5	58.6	0.31	3,503.5	156.1	0.85	ZZ
P5KBTZ	X	2,682.5	-666.4	-3.58	2,938.5	-408.9	-2.24	ZZ
QC3G7B		3,601.3	252.4	1.36	3,491.8	144.4	0.79	ZZ
QPU66G		3,576.0	227.1	1.22	3,576.5	229.1	1.25	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
RCKUL1		3,685.5	336.6	1.81	3,578.0	230.6	1.26	ZZ
RDY6EW	*	2,826.5	-522.4	-2.81	2,850.5	-496.9	-2.72	ZZ
SH9P4J		3,181.4	-167.5	-0.90	3,180.7	-166.7	-0.91	ZZ
T1JZCV		3,509.5	160.6	0.86	3,568.0	220.6	1.21	ZZ
T6T62E		3,476.3	127.3	0.68	3,493.0	145.6	0.80	ZZ
TRJCFW		3,281.5	-67.4	-0.36	3,260.0	-87.4	-0.48	ZZ
TWN4UU		3,016.8	-332.1	-1.79	3,103.8	-243.5	-1.33	ZZ
U657E1		3,332.5	-16.4	-0.09	3,423.5	76.1	0.42	ZZ
US7458		3,262.7	-86.3	-0.46	3,298.9	-48.5	-0.27	ZZ
UXSZ6K		3,422.9	74.0	0.40	3,328.6	-18.7	-0.10	ZZ
VG2Q9Z		3,279.5	-69.4	-0.37	3,245.5	-101.9	-0.56	ZZ
VZQ679		3,498.4	149.4	0.80	3,505.7	158.3	0.87	ZZ
WDDMT		3,165.0	-183.9	-0.99	3,185.0	-162.4	-0.89	ZZ
WFVB1D	X	3,150.5	-198.4	-1.07	3,540.0	192.6	1.05	ZZ
Y47A23	X	1,448.0	-1,900.9	-10.22	1,412.5	-1,934.9	-10.59	ZZ
YADP8T		3,541.9	192.9	1.04	3,457.1	109.7	0.60	ZZ
YLVHCU		3,310.0	-38.9	-0.21	3,312.5	-34.9	-0.19	ZZ
YTWPDG		3,156.5	-192.5	-1.03	3,194.4	-153.0	-0.84	ZZ
YULY8Q		3,341.5	-7.4	-0.04	3,391.5	44.1	0.24	ZZ
Z5NPR5		3,513.9	165.0	0.89	3,598.6	251.2	1.37	ZZ
Z94YXG		3,330.8	-18.1	-0.10	3,331.5	-15.8	-0.09	ZZ

Summary Statistics

	Sample A91-A92	Sample A93-A94
Grand Means	3,348.93 psi	3,347.38 psi
Stnd Dev Btwn Labs	186.03 psi	182.77 psi

Statistics based on 87 of 91 reporting participants

Summary Statistics in SI Units

	Sample A91-A92	Sample A93-A94
Grand Means	23.090 MPa	23.08 MPa
Stnd Dev Btwn Labs	1.283 MPa	1.26 MPa

Statistics based on 87 of 91 reporting participants

Samples A91-A92: Polyisoprene compound, batch #1 & A93-A94: Polyisoprene compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Comments on assigned Data Flags for Test #605

CVR7BH (X) - Data for all Samples are low. Also inconsistent in testing within both Sample sets.

P5KBTZ (X) - Inconsistency in testing between Sample sets. Low data for Sample A92.

WFVB1D (X) - Inconsistency in testing between Sample sets.

Y47A23 (X) - Data for all Samples are low.

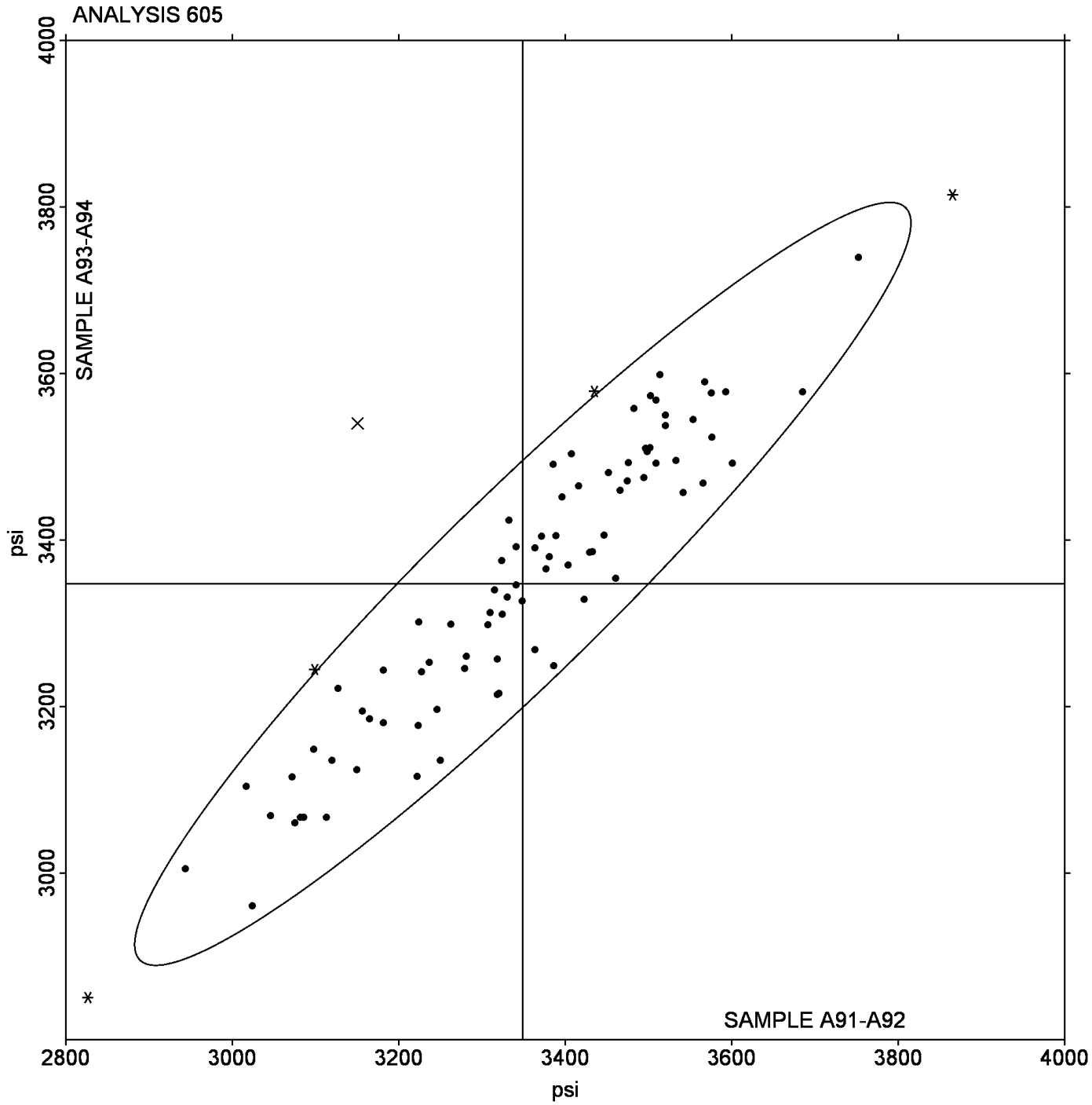
Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

Grand Mean Sample **A91-A92** = 3,348.93 psi

Grand Mean Sample **A93-A94** = 3,347.38 psi



Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1EB8Q1		629.1	27.8	0.94	622.6	19.5	0.65	ZZ
1L8PVG		600.0	-1.3	-0.04	600.0	-3.1	-0.10	ZZ
2CBC9C		550.5	-50.8	-1.71	563.0	-40.1	-1.34	ZZ
2CDZZB		592.5	-8.8	-0.29	602.0	-1.1	-0.04	ZZ
2CLA61		650.3	49.0	1.65	643.8	40.7	1.36	ZZ
2N85M4		607.5	6.2	0.21	600.0	-3.1	-0.10	ZZ
2TK64C		654.0	52.7	1.77	660.0	56.9	1.90	ZZ
383HML		547.0	-54.3	-1.82	556.0	-47.1	-1.57	ZZ
3KV4SG		620.5	19.2	0.65	628.0	24.9	0.83	ZZ
4CUPD3		668.8	67.6	2.27	674.4	71.3	2.38	ZZ
55W9B2		596.9	-4.3	-0.15	609.1	6.1	0.20	ZZ
64GQ9A		583.0	-18.3	-0.61	590.5	-12.6	-0.42	ZZ
6PL8HR		594.5	-6.8	-0.23	602.5	-0.6	-0.02	ZZ
6PZNXL		540.0	-61.3	-2.06	545.0	-58.1	-1.94	ZZ
6RVCX1		572.9	-28.4	-0.95	576.4	-26.7	-0.89	ZZ
74MXB1		634.5	33.2	1.12	617.5	14.4	0.48	ZZ
7RXB4V		570.0	-31.3	-1.05	587.5	-15.6	-0.52	ZZ
7W6CY3		590.0	-11.3	-0.38	607.5	4.4	0.15	ZZ
84XHES		603.0	1.7	0.06	599.5	-3.6	-0.12	ZZ
8F85BV		591.9	-9.3	-0.31	581.8	-21.3	-0.71	ZZ
93PLUJ		582.5	-18.8	-0.63	570.0	-33.1	-1.10	ZZ
9FPL43	X	482.5	-118.8	-3.99	495.0	-108.1	-3.61	ZZ
ABUQHU		613.5	12.2	0.41	618.0	14.9	0.50	ZZ
AKNLA5		631.5	30.2	1.02	637.5	34.4	1.15	ZZ
ANP2N9		631.0	29.7	1.00	627.0	23.9	0.80	ZZ
BSJ9S4		611.0	9.7	0.33	599.0	-4.1	-0.14	ZZ
C2P1Z3		614.5	13.2	0.45	604.5	1.4	0.05	ZZ
CC3PUW	*	543.0	-58.3	-1.96	565.5	-37.6	-1.25	ZZ
CD6G5G		587.0	-14.3	-0.48	584.0	-19.1	-0.64	ZZ
CNJ1SS	*	606.5	5.2	0.18	634.5	31.4	1.05	ZZ
CTZBEM		640.5	39.2	1.32	651.0	47.9	1.60	ZZ
D3D7RN		644.0	42.7	1.44	640.5	37.4	1.25	ZZ
DDE1DA		598.0	-3.3	-0.11	595.0	-8.1	-0.27	ZZ
DTXWN7		601.0	-0.3	-0.01	604.5	1.4	0.05	ZZ
DW6D7G		583.5	-17.8	-0.60	571.5	-31.6	-1.05	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
DXD2KG	*	639.5	38.2	1.29	615.0	11.9	0.40	ZZ
E9ZSQC		583.5	-17.8	-0.60	585.0	-18.1	-0.60	ZZ
EC4F7N		600.0	-1.3	-0.04	600.0	-3.1	-0.10	ZZ
EH7RXT		599.5	-1.8	-0.06	614.0	10.9	0.36	ZZ
EP6D91		612.5	11.2	0.38	620.0	16.9	0.57	ZZ
EVKUM		616.0	14.7	0.50	631.0	27.9	0.93	ZZ
EZ6AH4		592.5	-8.8	-0.30	586.4	-16.7	-0.56	ZZ
FDPHWG		594.5	-6.8	-0.23	596.0	-7.1	-0.24	ZZ
G7X9CT		545.2	-56.1	-1.88	535.3	-67.8	-2.26	ZZ
GJT2Y6		599.0	-2.3	-0.08	607.5	4.4	0.15	ZZ
GW66GN		589.5	-11.8	-0.40	568.5	-34.6	-1.15	ZZ
H4AM4L		640.0	38.7	1.30	647.0	43.9	1.47	ZZ
HGKLAT		610.5	9.2	0.31	611.5	8.4	0.28	ZZ
J1E3E8		626.0	24.7	0.83	624.0	20.9	0.70	ZZ
J3K8JM		643.5	42.2	1.42	656.5	53.4	1.78	ZZ
JENB94		608.5	7.2	0.24	602.0	-1.1	-0.04	ZZ
JHQQ1M	X	678.5	77.2	2.60	714.0	110.9	3.70	ZZ
JSAYJP		551.0	-50.3	-1.69	552.5	-50.6	-1.69	ZZ
K14BDF		612.2	10.9	0.37	622.8	19.7	0.66	ZZ
KB1JRR		582.0	-19.3	-0.65	580.5	-22.6	-0.75	ZZ
KQ9PBY		666.9	65.6	2.21	667.8	64.7	2.16	ZZ
KQESEQ		583.5	-17.8	-0.60	582.0	-21.1	-0.70	ZZ
LTWB6M		576.5	-24.8	-0.83	581.0	-22.1	-0.74	ZZ
LXZLKT		576.3	-25.0	-0.84	570.0	-33.1	-1.10	ZZ
M2JVQX		613.5	12.2	0.41	616.0	12.9	0.43	ZZ
M3WEJ8		598.0	-3.3	-0.11	594.0	-9.1	-0.30	ZZ
MCYQ4B		615.5	14.2	0.48	634.0	30.9	1.03	ZZ
N6TCFB		568.0	-33.3	-1.12	569.5	-33.6	-1.12	ZZ
NYCQNP		608.0	6.7	0.23	628.5	25.4	0.85	ZZ
P1FS9S		607.5	6.2	0.21	599.0	-4.1	-0.14	ZZ
P7EELZ		616.0	14.7	0.50	617.5	14.4	0.48	ZZ
PRKNK6		608.5	7.2	0.24	626.0	22.9	0.77	ZZ
Q3RXNL		634.9	33.6	1.13	628.2	25.1	0.84	ZZ
QB8XFV		576.7	-24.6	-0.83	570.7	-32.4	-1.08	ZZ
QH5QBH		585.5	-15.8	-0.53	575.5	-27.6	-0.92	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
REK528		568.5	-32.8	-1.10	576.5	-26.6	-0.89	ZZ
S52NM6		660.0	58.7	1.97	657.5	54.4	1.82	ZZ
SN722S		605.5	4.2	0.14	606.0	2.9	0.10	ZZ
SV17Y4		648.0	46.7	1.57	651.0	47.9	1.60	ZZ
UAZKYY		546.0	-55.3	-1.86	547.0	-56.1	-1.87	ZZ
UJT9XR	X	793.0	191.7	6.45	832.5	229.4	7.66	ZZ
VAC491	*	533.5	-67.8	-2.28	560.0	-43.1	-1.44	ZZ
VC7Q8Y		626.5	25.2	0.85	619.5	16.4	0.55	ZZ
VELNW7		613.0	11.7	0.39	629.5	26.4	0.88	ZZ
VF72WW		612.5	11.2	0.38	608.0	4.9	0.16	ZZ
VQ8W13		618.4	17.1	0.57	617.0	14.0	0.47	ZZ
VVFF2G		568.5	-32.8	-1.10	557.0	-46.1	-1.54	ZZ
W2FNZM		568.5	-32.8	-1.10	576.0	-27.1	-0.90	ZZ
X44C5L		582.0	-19.3	-0.65	583.5	-19.6	-0.65	ZZ
XDFC3H		576.0	-25.3	-0.85	575.0	-28.1	-0.94	ZZ
XELEJF		622.0	20.7	0.70	612.0	8.9	0.30	ZZ
XJFDRK		591.0	-10.3	-0.34	584.5	-18.6	-0.62	ZZ
XK1GSB		598.5	-2.8	-0.09	608.0	4.9	0.16	ZZ
Z3BDJ5		604.8	3.5	0.12	611.5	8.4	0.28	ZZ
Z8T3BP	X	614.0	12.7	0.43	562.0	-41.1	-1.37	ZZ

Summary Statistics

	Sample A91-A92	Sample A93-A94
Grand Means	601.26 percent	603.07 percent
Stnd Dev Btwn Labs	29.75 percent	29.96 percent

Statistics based on 86 of 90 reporting participants

Samples A91-A92: Polyisoprene compound, batch #1 & A93-A94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #606

9FPL43 (X) - Data for all Samples are low.

JHQQ1M (X) - Inconsistency in testing between Sample sets. High data for most Sample sets.

UJT9XR (X) - Data for all Samples are high.

Z8T3BP (X) - Inconsistency in testing between Sample sets. Also inconsistent in testing within Sample sets A93-A94.

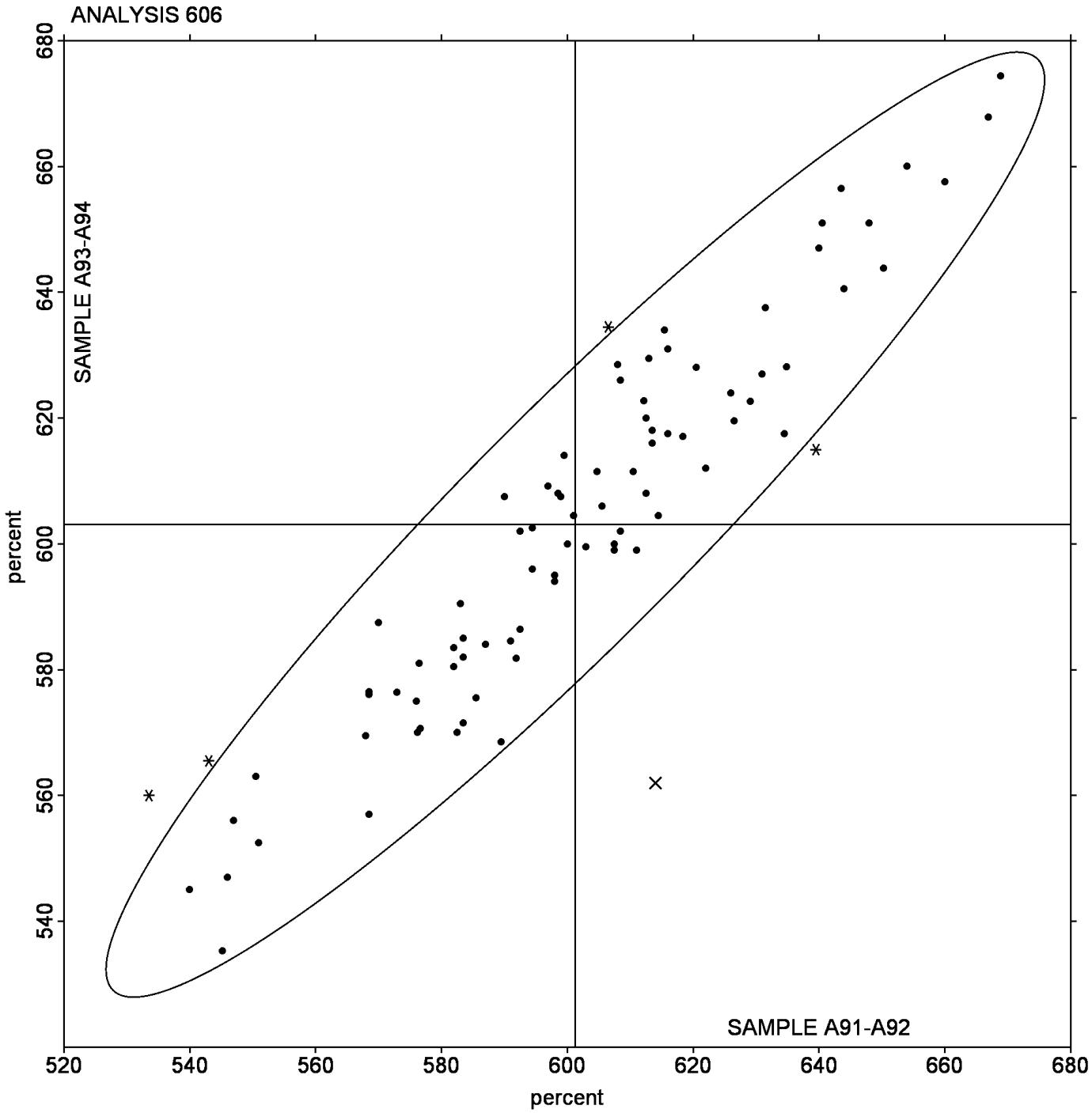
Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample **A91-A92** = 601.26 percent

Grand Mean Sample **A93-A94** = 603.07 percent



Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1AKXT9		901.0	-145.2	-2.02	911.5	-118.9	-1.49	ZZ
1ELWKG		1,166.5	120.3	1.67	1,167.0	136.6	1.71	ZZ
256PXX		1,080.0	33.8	0.47	1,021.0	-9.4	-0.12	ZZ
29411A		988.5	-57.7	-0.80	893.5	-136.9	-1.72	ZZ
2E7ASA		1,094.3	48.1	0.67	1,131.3	100.9	1.26	ZZ
2UYZXE		1,009.0	-37.2	-0.52	986.5	-43.9	-0.55	ZZ
33EURF		1,012.5	-33.7	-0.47	1,013.5	-16.9	-0.21	ZZ
3QF23X		1,023.0	-23.3	-0.32	1,058.7	28.3	0.35	ZZ
5UHQ5H		1,087.8	41.6	0.58	1,095.0	64.7	0.81	ZZ
5YJPPN		985.0	-61.2	-0.85	965.5	-64.9	-0.81	ZZ
67FRRD		1,119.5	73.3	1.02	1,076.0	45.6	0.57	ZZ
6EBZJC		1,124.3	78.0	1.08	1,126.0	95.6	1.20	ZZ
6MRBFK		1,160.1	113.9	1.58	1,116.3	85.9	1.08	ZZ
6VYZ8W		1,069.5	23.3	0.32	1,076.0	45.6	0.57	ZZ
7GT5E5		1,049.0	2.8	0.04	1,009.5	-20.9	-0.26	ZZ
7M9GFA		1,088.5	42.3	0.59	1,037.0	6.6	0.08	ZZ
7V45JY		1,108.0	61.8	0.86	1,009.0	-21.4	-0.27	ZZ
82WV6C		1,058.8	12.6	0.17	1,050.8	20.4	0.26	ZZ
89NYRN		986.0	-60.2	-0.84	1,001.5	-28.9	-0.36	ZZ
8J2SCC		1,074.0	27.8	0.39	1,066.5	36.1	0.45	ZZ
8K24HY		1,062.0	15.8	0.22	1,040.5	10.1	0.13	ZZ
8MJVD3		996.5	-49.7	-0.69	977.0	-53.4	-0.67	ZZ
9DF9M2	X	1,401.5	355.3	4.93	1,274.0	243.6	3.05	ZZ
9PE9RT		1,059.5	13.3	0.18	1,030.0	-0.4	0.00	ZZ
BJU1BC		997.5	-48.7	-0.68	955.0	-75.4	-0.94	ZZ
BZC2RM		1,082.7	36.5	0.51	1,075.1	44.7	0.56	ZZ
CJND84		1,085.0	38.8	0.54	1,035.5	5.1	0.06	ZZ
D1P18B		1,014.7	-31.5	-0.44	1,006.2	-24.2	-0.30	ZZ
D8Y1EX		1,066.5	20.3	0.28	1,014.0	-16.4	-0.21	ZZ
D9WRM	*	972.0	-74.2	-1.03	871.0	-159.4	-2.00	ZZ
DV6U4W		977.0	-69.2	-0.96	1,006.5	-23.9	-0.30	ZZ
E8N63W		989.0	-57.2	-0.79	959.5	-70.9	-0.89	ZZ
EAZVLN		1,132.9	86.6	1.20	1,169.6	139.2	1.74	ZZ
EQJCTK		1,051.5	5.3	0.07	1,013.5	-16.9	-0.21	ZZ
G864VT		1,080.0	33.8	0.47	1,042.5	12.1	0.15	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
GQKC5N	X	493.5	-552.7	-7.67	524.5	-505.9	-6.34	ZZ
HM8D4V		1,137.0	90.8	1.26	1,133.0	102.6	1.29	ZZ
J17236		1,046.0	-0.2	0.00	1,005.5	-24.9	-0.31	ZZ
J2K86F		1,082.5	36.3	0.50	1,072.0	41.6	0.52	ZZ
JK8XSW		1,101.5	55.3	0.77	1,029.5	-0.9	-0.01	ZZ
K8RJA1		1,050.1	3.9	0.05	1,105.2	74.8	0.94	ZZ
KCHKXG		982.2	-64.0	-0.89	1,026.7	-3.7	-0.05	ZZ
KTL7Y1		1,040.0	-6.2	-0.09	1,040.0	9.6	0.12	ZZ
L9SRBJ		993.0	-53.2	-0.74	957.0	-73.4	-0.92	ZZ
LA5C4M		1,075.5	29.2	0.41	1,057.3	26.9	0.34	ZZ
LCTSD1		904.0	-142.2	-1.97	920.5	-109.9	-1.38	ZZ
LFPMYX		993.1	-53.2	-0.74	954.3	-76.1	-0.95	ZZ
M7XVFG		975.0	-71.2	-0.99	1,007.0	-23.4	-0.29	ZZ
MD96YH		1,014.0	-32.2	-0.45	959.0	-71.4	-0.89	ZZ
MP2UC4		1,029.0	-17.2	-0.24	1,028.0	-2.4	-0.03	ZZ
MPVHU3		909.5	-136.7	-1.90	908.5	-121.9	-1.53	ZZ
MT6N6N		1,115.3	69.0	0.96	1,133.9	103.5	1.30	ZZ
N4MTQK		1,059.5	13.3	0.18	1,042.0	11.6	0.15	ZZ
NFE9N6		1,066.5	20.3	0.28	1,061.0	30.6	0.38	ZZ
NWZ5HF		1,156.7	110.5	1.53	1,106.6	76.3	0.96	ZZ
PBRP2J		1,202.0	155.8	2.16	1,211.0	180.6	2.26	ZZ
PC7E42	X	1,262.0	215.8	3.00	1,132.5	102.1	1.28	ZZ
PEP23E		959.5	-86.7	-1.20	923.5	-106.9	-1.34	ZZ
PJ6LPQ		1,042.1	-4.1	-0.06	998.6	-31.8	-0.40	ZZ
PXQ6ZY	X	460.5	-585.7	-8.13	483.0	-547.4	-6.86	ZZ
PY7PCV		988.1	-58.2	-0.81	947.2	-83.2	-1.04	ZZ
QM8NBL		985.1	-61.1	-0.85	946.5	-83.9	-1.05	ZZ
QMR7VP		1,103.0	56.8	0.79	1,041.0	10.6	0.13	ZZ
QRRDS7		1,089.2	43.0	0.60	1,145.8	115.4	1.45	ZZ
QXTL62		1,031.5	-14.7	-0.20	996.0	-34.4	-0.43	ZZ
R3BBZV	X	1,309.0	262.8	3.65	1,265.0	234.6	2.94	ZZ
RE3HRE		955.0	-91.2	-1.27	921.5	-108.9	-1.37	ZZ
RF4VFM		996.5	-49.7	-0.69	993.5	-36.9	-0.46	ZZ
S9DRAP		1,124.5	78.3	1.09	1,102.5	72.1	0.90	ZZ
SJAZCE		1,054.5	8.3	0.11	1,075.5	45.1	0.57	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Diff from Grand Mean	CPV	Sample A93-A94 Lab Mean	Diff from Grand Mean	CPV	Instr Code
T5SVVK		1,116.5	70.3	0.98	1,118.5	88.1	1.10	ZZ
TBGGRX	*	1,258.5	212.3	2.95	1,270.5	240.1	3.01	ZZ
THLUQK		971.8	-74.5	-1.03	1,008.0	-22.4	-0.28	ZZ
U91Y9R		1,036.5	-9.7	-0.13	1,019.0	-11.4	-0.14	ZZ
UNSHAF		1,096.5	50.3	0.70	1,094.0	63.6	0.80	ZZ
URM4KZ		1,051.5	5.3	0.07	1,030.5	0.1	0.00	ZZ
UT4FXG		1,023.0	-23.2	-0.32	999.5	-30.9	-0.39	ZZ
W1CVBV		1,009.0	-37.2	-0.52	1,021.5	-8.9	-0.11	ZZ
W3QT2Q		947.5	-98.7	-1.37	903.0	-127.4	-1.60	ZZ
WHWLK		995.0	-51.3	-0.71	1,015.3	-15.1	-0.19	ZZ
WKHCL		1,141.0	94.8	1.32	1,049.5	19.1	0.24	ZZ
WN297M		1,083.5	37.3	0.52	989.0	-41.4	-0.52	ZZ
WV8MR	*	1,003.5	-42.7	-0.59	1,082.5	52.1	0.65	ZZ
X2353U	*	865.0	-181.2	-2.52	845.5	-184.9	-2.32	ZZ
XQGUXJ		955.9	-90.3	-1.25	988.5	-41.9	-0.52	ZZ
XYBVGH		964.5	-81.7	-1.13	921.0	-109.4	-1.37	ZZ
YZX329	*	1,205.0	158.8	2.20	1,245.0	214.6	2.69	ZZ
ZRWZCR		1,099.0	52.8	0.73	1,064.0	33.6	0.42	ZZ

Summary Statistics

	Sample A91-A92	Sample A93-A94
Grand Means	1,046.22 psi	1,030.39 psi
Stnd Dev Btwn Labs	72.04 psi	79.78 psi

Statistics based on 83 of 88 reporting participants

Summary Statistics in SI Units

	Sample A91-A92	Sample A93-A94
Grand Means	7.2134 MPa	7.10 MPa
Stnd Dev Btwn Labs	0.4967 MPa	0.55 MPa

Statistics based on 83 of 88 reporting participants

Samples A91-A92: Polyisoprene compound, batch #1 & A93-A94: Polyisoprene compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Comments on assigned Data Flags for Test #607

9DF9M2 (X) - Data for all Samples are high.

GQKC5N (X) - Data for all Samples are low.

PC7E42 (X) - Inconsistency in testing between Sample sets. High data for Sample set A91-A92.

PXQ6ZY (X) - Data for all Samples are low.

R3BBZV (X) - Data for all Samples are high. Possible Systematic Error.

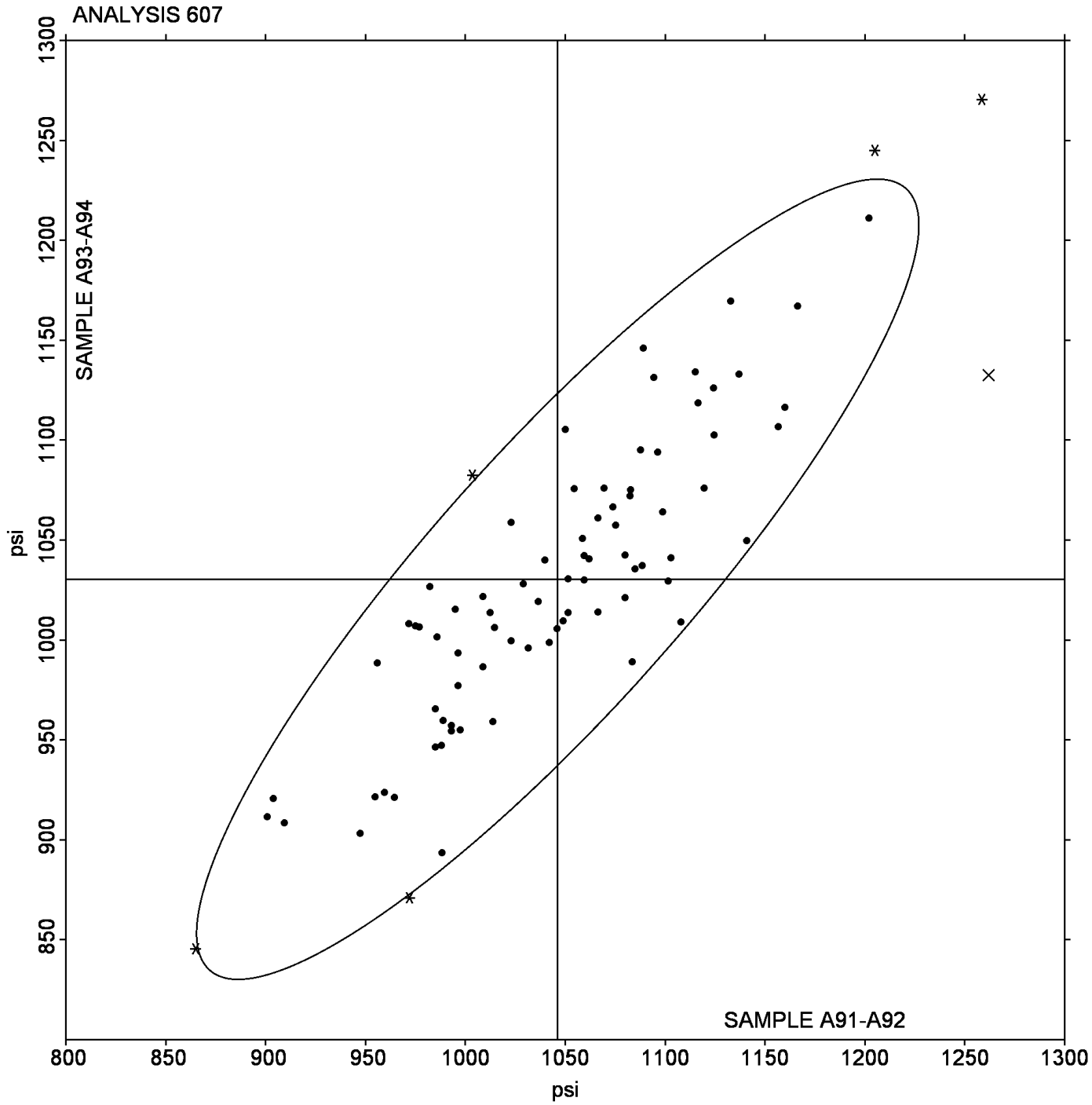
Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample **A91-A92** = 1,046.22 psi

Grand Mean Sample **A93-A94** = 1,030.39 psi



Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

		Sample A91-A92			Sample A93-A94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
18DFVD		226.0	-1.3	-0.10	224.5	0.7	0.05	ZZ
1QMSYV		215.5	-11.8	-0.90	222.0	-1.8	-0.14	ZZ
29QEQN		219.0	-8.3	-0.64	232.1	8.2	0.62	ZZ
2B2NAZ		240.0	12.7	0.97	229.2	5.3	0.40	ZZ
373APE		214.0	-13.3	-1.02	208.0	-15.8	-1.19	ZZ
4D9YLE		227.5	0.2	0.01	215.5	-8.3	-0.63	ZZ
4U26RM		255.0	27.7	2.11	250.5	26.7	2.01	ZZ
52DPJL		228.0	0.7	0.05	215.0	-8.8	-0.67	ZZ
551ZXH		215.6	-11.7	-0.90	209.2	-14.6	-1.10	ZZ
5CLZPE		224.0	-3.3	-0.25	229.5	5.7	0.43	ZZ
5KS6HX	X	108.0	-119.3	-9.11	107.0	-116.8	-8.80	ZZ
66354K		231.2	3.9	0.30	229.4	5.6	0.42	ZZ
6D6FW2		232.0	4.7	0.36	230.5	6.7	0.50	ZZ
6LG9UL		250.8	23.5	1.80	244.5	20.7	1.56	ZZ
6ZPJN8		210.5	-16.8	-1.29	215.5	-8.3	-0.63	ZZ
73LNUK		220.0	-7.3	-0.56	221.5	-2.3	-0.18	ZZ
77T2GA		216.5	-10.8	-0.83	216.5	-7.3	-0.55	ZZ
7M8PH2		227.7	0.4	0.03	223.4	-0.5	-0.04	ZZ
7TMPHS		252.4	25.0	1.91	253.1	29.2	2.20	ZZ
7U3AET		223.1	-4.3	-0.33	235.5	11.6	0.88	ZZ
896TEY		240.6	13.2	1.01	246.8	22.9	1.73	ZZ
8C5713	X	317.0	89.7	6.85	296.5	72.7	5.47	ZZ
925XZK		216.5	-10.8	-0.83	208.0	-15.8	-1.19	ZZ
9ALE27		233.5	6.2	0.47	241.5	17.6	1.33	ZZ
9L5A3Y		237.5	10.2	0.78	240.0	16.2	1.22	ZZ
9PJQBG		226.0	-1.3	-0.10	237.0	13.2	0.99	ZZ
9PRW75		217.6	-9.8	-0.75	224.8	1.0	0.07	ZZ
9UC43S		206.5	-20.8	-1.59	202.5	-21.3	-1.61	ZZ
AA6RLW		203.5	-23.8	-1.82	206.5	-17.3	-1.31	ZZ
AGVBM		227.2	-0.1	-0.01	228.3	4.4	0.33	ZZ
AJN31H		235.5	8.2	0.62	233.5	9.7	0.73	ZZ
AYCZQ1		210.9	-16.4	-1.26	205.3	-18.5	-1.40	ZZ
B1FZJ6		234.0	6.7	0.51	226.5	2.7	0.20	ZZ
B9MTJZ	*	217.5	-9.8	-0.75	234.5	10.7	0.80	ZZ
BHP9WY		243.0	15.7	1.20	232.0	8.2	0.61	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
BMCK8A		228.5	1.2	0.09	230.5	6.7	0.50	ZZ
BWZA26		223.5	-3.8	-0.29	208.0	-15.8	-1.19	ZZ
C12FHD		227.5	0.2	0.01	224.5	0.7	0.05	ZZ
CNH8UJ		229.6	2.3	0.17	225.3	1.4	0.11	ZZ
D2YB66		220.5	-6.9	-0.52	221.9	-1.9	-0.15	ZZ
D7YFCJ		206.5	-20.8	-1.59	210.0	-13.8	-1.04	ZZ
DJZWP7		207.5	-19.8	-1.51	211.5	-12.3	-0.93	ZZ
F1D3W3		206.9	-20.4	-1.56	198.5	-25.3	-1.91	ZZ
F2SDTT		232.5	5.2	0.40	230.0	6.2	0.46	ZZ
F3NRUG		239.0	11.7	0.89	232.5	8.7	0.65	ZZ
FSVVRD		230.0	2.7	0.20	223.0	-0.8	-0.06	ZZ
FVLQ9Z		216.0	-11.3	-0.87	209.0	-14.8	-1.12	ZZ
H34629		235.5	8.2	0.62	227.0	3.2	0.24	ZZ
JZENFU		222.4	-5.0	-0.38	222.7	-1.2	-0.09	ZZ
KCPUKU		230.5	3.2	0.24	220.5	-3.3	-0.25	ZZ
KNXVCZ		217.5	-9.8	-0.75	215.0	-8.8	-0.67	ZZ
KREUK		246.5	19.2	1.46	228.5	4.7	0.35	ZZ
LB84VV		245.5	18.2	1.39	247.5	23.7	1.78	ZZ
LJXKXY		257.5	30.2	2.30	248.0	24.2	1.82	ZZ
LSVRS4	*	192.5	-34.8	-2.66	185.5	-38.3	-2.89	ZZ
LX41A1		232.1	4.7	0.36	239.3	15.5	1.17	ZZ
M2G9SW		238.5	11.2	0.85	223.0	-0.8	-0.06	ZZ
M3BR4L		218.8	-8.6	-0.65	218.0	-5.8	-0.44	ZZ
M4MGBP		231.0	3.7	0.28	224.0	0.2	0.01	ZZ
MBVBU		239.5	12.2	0.93	233.5	9.7	0.73	ZZ
MQX7DS		217.6	-9.8	-0.75	203.1	-20.8	-1.57	ZZ
MQX86Q		221.9	-5.4	-0.41	217.6	-6.3	-0.47	ZZ
NAM97Q		223.0	-4.3	-0.33	203.0	-20.8	-1.57	ZZ
NN5T6U		228.4	1.1	0.08	216.1	-7.7	-0.58	ZZ
PLFJYD		217.2	-10.1	-0.77	223.2	-0.6	-0.05	ZZ
R1H2Q9		233.5	6.2	0.47	220.0	-3.8	-0.29	ZZ
SHDZA3		204.2	-23.1	-1.77	213.7	-10.2	-0.77	ZZ
T27XEG		255.5	28.2	2.15	243.5	19.7	1.48	ZZ
TGYYUU		222.0	-5.3	-0.41	221.0	-2.8	-0.21	ZZ
U3KD9Z		221.5	-5.8	-0.44	216.0	-7.8	-0.59	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
UF53VH		231.5	4.2	0.32	223.0	-0.8	-0.06	ZZ
UKLFPJ		239.3	12.0	0.92	245.1	21.3	1.60	ZZ
URCH9W		215.4	-11.9	-0.91	219.0	-4.8	-0.36	ZZ
UST6XN		232.5	5.2	0.40	227.5	3.7	0.28	ZZ
UU54RS		234.0	6.7	0.51	232.5	8.7	0.65	ZZ
V7RH5S		204.5	-22.8	-1.74	192.5	-31.3	-2.36	ZZ
VJR3RH		219.0	-8.3	-0.64	219.0	-4.8	-0.37	ZZ
VU3U9E	X	270.0	42.7	3.26	277.5	53.7	4.04	ZZ
VWMSFJ		237.0	9.7	0.74	214.0	-9.8	-0.74	ZZ
VYY4ES	*	255.0	27.7	2.11	235.5	11.7	0.88	ZZ
WRN345		233.0	5.7	0.43	222.0	-1.8	-0.14	ZZ
XMH3TJ		237.0	9.7	0.74	237.8	13.9	1.05	ZZ
XQ3JTR		234.0	6.7	0.51	218.0	-5.8	-0.44	ZZ
YWRP8D		226.0	-1.3	-0.10	223.5	-0.3	-0.03	ZZ
YZHM1H		230.0	2.7	0.20	239.0	15.2	1.14	ZZ
Z7YFXZ		242.0	14.7	1.12	237.5	13.7	1.03	ZZ
ZEH4R1		233.0	5.7	0.43	218.5	-5.3	-0.40	ZZ
ZYPLR4		220.5	-6.8	-0.52	216.0	-7.8	-0.59	ZZ

Summary Statistics

	Sample A91-A92	Sample A93-A94
Grand Means	227.33 psi	223.85 psi
Stnd Dev Btwn Labs	13.09 psi	13.28 psi

Statistics based on 85 of 88 reporting participants

Summary Statistics in SI Units

	Sample A91-A92	Sample A93-A94
Grand Means	1.5673 MPa	1.54 MPa
Stnd Dev Btwn Labs	0.0903 MPa	0.09 MPa

Statistics based on 85 of 88 reporting participants

Samples A91-A92: Polyisoprene compound, batch #1 & A93-A94: Polyisoprene compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Comments on assigned Data Flags for Test #608

5KS6HX (X) - Data for all Samples are low.

8C5713 (X) - Data for all Samples are high.

VU3U9E (X) - Data for all Samples are high.

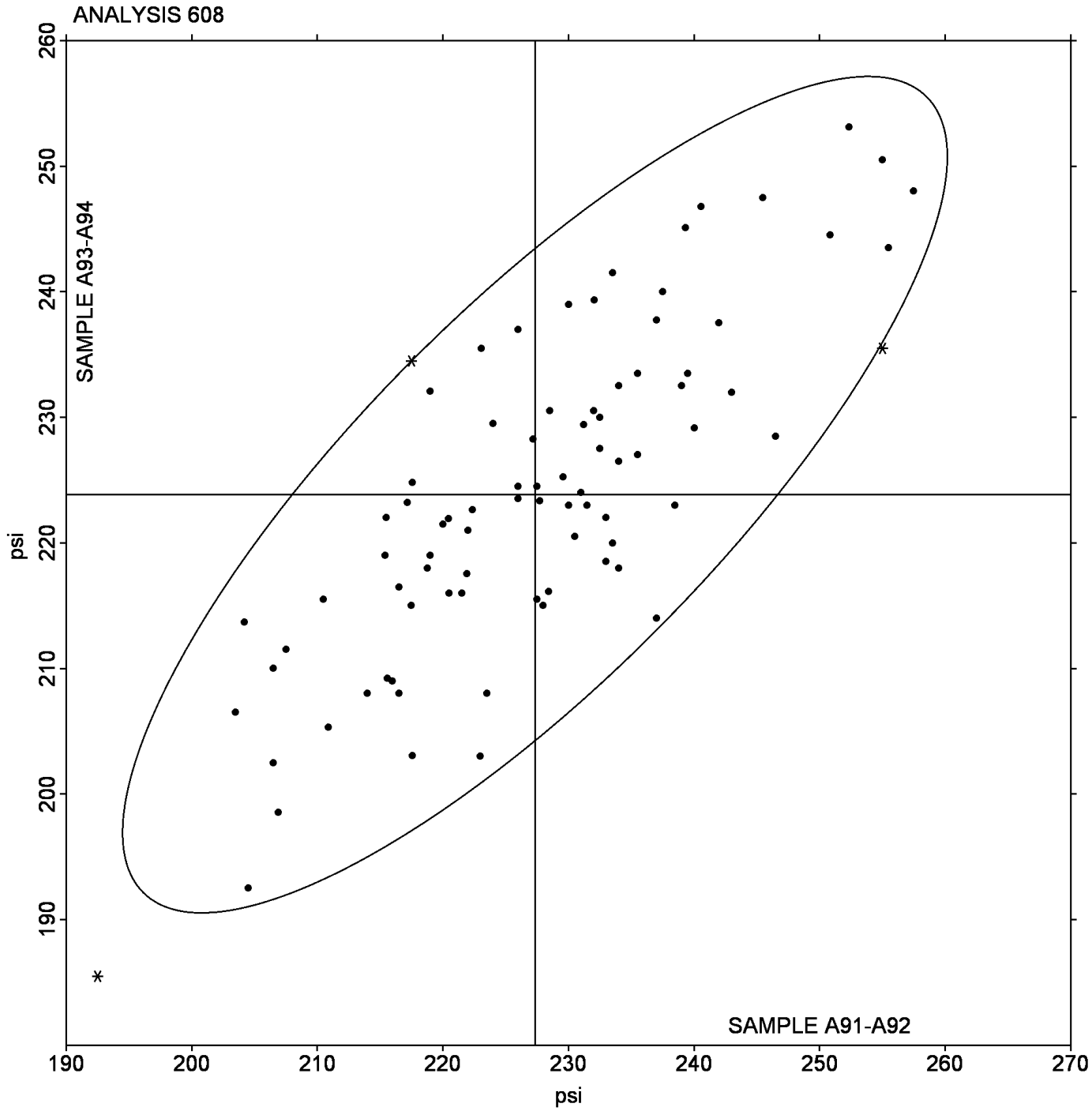
Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample **A91-A92** = 227.33 psi

Grand Mean Sample **A93-A94** = 223.85 psi



Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
1HYBN8		52.05	0.38	0.24	52.55	1.04	0.63	ZZ
1QMW9Y		53.00	1.33	0.83	52.00	0.49	0.30	ZZ
22WS69		50.50	-1.17	-0.73	50.00	-1.51	-0.92	ZZ
24REVJ		52.00	0.33	0.21	51.50	-0.01	-0.01	ZZ
29FCHV		49.50	-2.17	-1.35	49.50	-2.01	-1.22	ZZ
2BD33N		51.00	-0.67	-0.42	51.50	-0.01	-0.01	ZZ
2MA67G		51.50	-0.17	-0.10	51.00	-0.51	-0.31	ZZ
2WCJ4W		52.00	0.33	0.21	51.50	-0.01	-0.01	ZZ
379RF7		51.05	-0.62	-0.38	50.65	-0.86	-0.52	ZZ
3CLLL4		50.75	-0.92	-0.57	50.65	-0.86	-0.52	ZZ
3U4MB1		55.00	3.33	2.08	55.00	3.49	2.12	ZZ
3ZQ7V2		50.95	-0.72	-0.45	49.95	-1.56	-0.95	ZZ
4E2YA7		55.00	3.33	2.08	55.00	3.49	2.12	ZZ
4Z9554	*	50.00	-1.67	-1.04	48.70	-2.81	-1.71	ZZ
55TA16		51.00	-0.67	-0.42	50.00	-1.51	-0.92	ZZ
5PTZY3		51.95	0.28	0.18	52.40	0.89	0.54	ZZ
5UAC59		52.25	0.58	0.37	51.25	-0.26	-0.16	ZZ
68AVGK		51.20	-0.47	-0.29	50.90	-0.61	-0.37	ZZ
75KFDC	*	53.75	2.08	1.30	52.25	0.74	0.45	ZZ
7PBR43		51.00	-0.67	-0.42	50.60	-0.91	-0.55	ZZ
8F681K		50.60	-1.07	-0.67	50.15	-1.36	-0.83	ZZ
91UZZ7		50.60	-1.07	-0.67	50.40	-1.11	-0.67	ZZ
92NSR8		49.00	-2.67	-1.66	49.00	-2.51	-1.52	ZZ
942951		52.75	1.08	0.68	52.50	0.99	0.60	ZZ
9LW1QT		52.00	0.33	0.21	51.00	-0.51	-0.31	ZZ
9S1PQ1		53.50	1.83	1.15	54.00	2.49	1.51	ZZ
AV5RC9	*	56.50	4.83	3.02	56.50	4.99	3.03	ZZ
B19WRZ		53.50	1.83	1.15	53.50	1.99	1.21	ZZ
CBY78C		52.00	0.33	0.21	53.00	1.49	0.90	ZZ
CMDETK		52.00	0.33	0.21	51.50	-0.01	-0.01	ZZ
CSKWXC		54.35	2.68	1.68	54.35	2.84	1.72	ZZ
CXEPDN		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
CZYE2F		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
E5K8EX		51.40	-0.27	-0.17	51.45	-0.06	-0.04	ZZ
EFHQ55		51.00	-0.67	-0.42	51.50	-0.01	-0.01	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
ENCEK3		52.00	0.33	0.21	52.00	0.49	0.30	ZZ
FDMJ5T		53.00	1.33	0.83	52.50	0.99	0.60	ZZ
FYU9K2		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
FYUVV1		52.90	1.23	0.77	53.15	1.64	0.99	ZZ
G1LHC2		50.15	-1.52	-0.95	49.70	-1.81	-1.10	ZZ
GBJLGV		48.75	-2.92	-1.82	48.80	-2.71	-1.65	ZZ
GBWB73		51.15	-0.52	-0.32	51.80	0.29	0.17	ZZ
HN8WG3		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
J32QSE	X	51.50	-0.17	-0.10	49.00	-2.51	-1.52	ZZ
J9Y6UG		52.30	0.63	0.40	51.95	0.44	0.27	ZZ
K7XN2L		52.00	0.33	0.21	52.50	0.99	0.60	ZZ
KDRFNZ		51.40	-0.27	-0.17	51.10	-0.41	-0.25	ZZ
KFB311		55.00	3.33	2.08	55.00	3.49	2.12	ZZ
KJYA7P		52.00	0.33	0.21	53.00	1.49	0.90	ZZ
KKS25Z		55.35	3.68	2.30	55.00	3.49	2.12	ZZ
KQ6H56		50.00	-1.67	-1.04	49.00	-2.51	-1.52	ZZ
L29EAS		50.15	-1.52	-0.95	50.35	-1.16	-0.71	ZZ
LF7HHK		50.50	-1.17	-0.73	50.45	-1.06	-0.64	ZZ
LG1C12		52.55	0.88	0.55	52.50	0.99	0.60	ZZ
LT1KPL		52.70	1.03	0.65	52.25	0.74	0.45	ZZ
LT2F5X		50.50	-1.17	-0.73	50.50	-1.01	-0.61	ZZ
LX7HGB		51.00	-0.67	-0.42	51.35	-0.16	-0.10	ZZ
MJ97MJ		49.50	-2.17	-1.35	50.00	-1.51	-0.92	ZZ
MX8BTV	X	55.00	3.33	2.08	53.00	1.49	0.90	ZZ
NQRZD9		54.00	2.33	1.46	54.00	2.49	1.51	ZZ
PHXVE7		54.00	2.33	1.46	53.00	1.49	0.90	ZZ
PREFWQ		52.25	0.58	0.37	52.00	0.49	0.30	ZZ
Q468HR		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
QE9QMN		51.05	-0.62	-0.38	51.20	-0.31	-0.19	ZZ
QSQE46	*	47.50	-4.17	-2.60	48.00	-3.51	-2.13	ZZ
RCZ7YB		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
RQHKQ4		52.00	0.33	0.21	51.50	-0.01	-0.01	ZZ
RUYYJ7		51.50	-0.17	-0.10	50.50	-1.01	-0.61	ZZ
RVEHW		51.50	-0.17	-0.10	52.00	0.49	0.30	ZZ
S3CEES		52.00	0.33	0.21	52.25	0.74	0.45	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample A93-A94 Lab Mean	Sample A93-A94 Diff from Grand Mean	Sample A93-A94 CPV	Instr Code
S53H4T		52.00	0.33	0.21	52.00	0.49	0.30	ZZ
S5G5CM		52.50	0.83	0.52	52.00	0.49	0.30	ZZ
S9B2RZ		51.40	-0.27	-0.17	51.10	-0.41	-0.25	ZZ
SB11YQ		50.00	-1.67	-1.04	50.00	-1.51	-0.92	ZZ
SQ6EFT		52.00	0.33	0.21	51.00	-0.51	-0.31	ZZ
TV1XV4		51.00	-0.67	-0.42	51.00	-0.51	-0.31	ZZ
U1FQ3A		54.00	2.33	1.46	54.00	2.49	1.51	ZZ
UN18VL		53.00	1.33	0.83	53.50	1.99	1.21	ZZ
V24HBY		54.50	2.83	1.77	54.30	2.79	1.69	ZZ
VLU7ER		51.00	-0.67	-0.42	51.50	-0.01	-0.01	ZZ
VVPR77		50.50	-1.17	-0.73	50.50	-1.01	-0.61	ZZ
W1CR1T		51.00	-0.67	-0.42	51.00	-0.51	-0.31	ZZ
W5KSRJ		51.05	-0.62	-0.38	51.45	-0.06	-0.04	ZZ
X7VCHP		49.50	-2.17	-1.35	49.50	-2.01	-1.22	ZZ
XA92RZ		51.50	-0.17	-0.10	51.00	-0.51	-0.31	ZZ
XJ8KEP		54.00	2.33	1.46	54.00	2.49	1.51	ZZ
Z7X3FP		50.50	-1.17	-0.73	50.50	-1.01	-0.61	ZZ
ZCUNGS		51.50	-0.17	-0.10	51.60	0.09	0.05	ZZ
ZCVLP1		51.75	0.08	0.05	51.75	0.24	0.14	ZZ
ZKP5W6		51.65	-0.02	-0.01	50.75	-0.76	-0.46	ZZ
ZUZRLS	*	50.50	-1.17	-0.73	49.00	-2.51	-1.52	ZZ

Summary Statistics

	Sample A91-A92	Sample A93-A94
Grand Means	51.665 Type A	51.512 Type A
Stnd Dev Btwn Labs	1.601 Type A	1.647 Type A

Statistics based on 89 of 91 reporting participants

Samples A91-A92: Polyisoprene compound, batch #1 & A93-A94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

J32QSE (X) - Inconsistency in testing between Sample sets.

MX8BTV (X) - Inconsistency in testing between Sample sets.

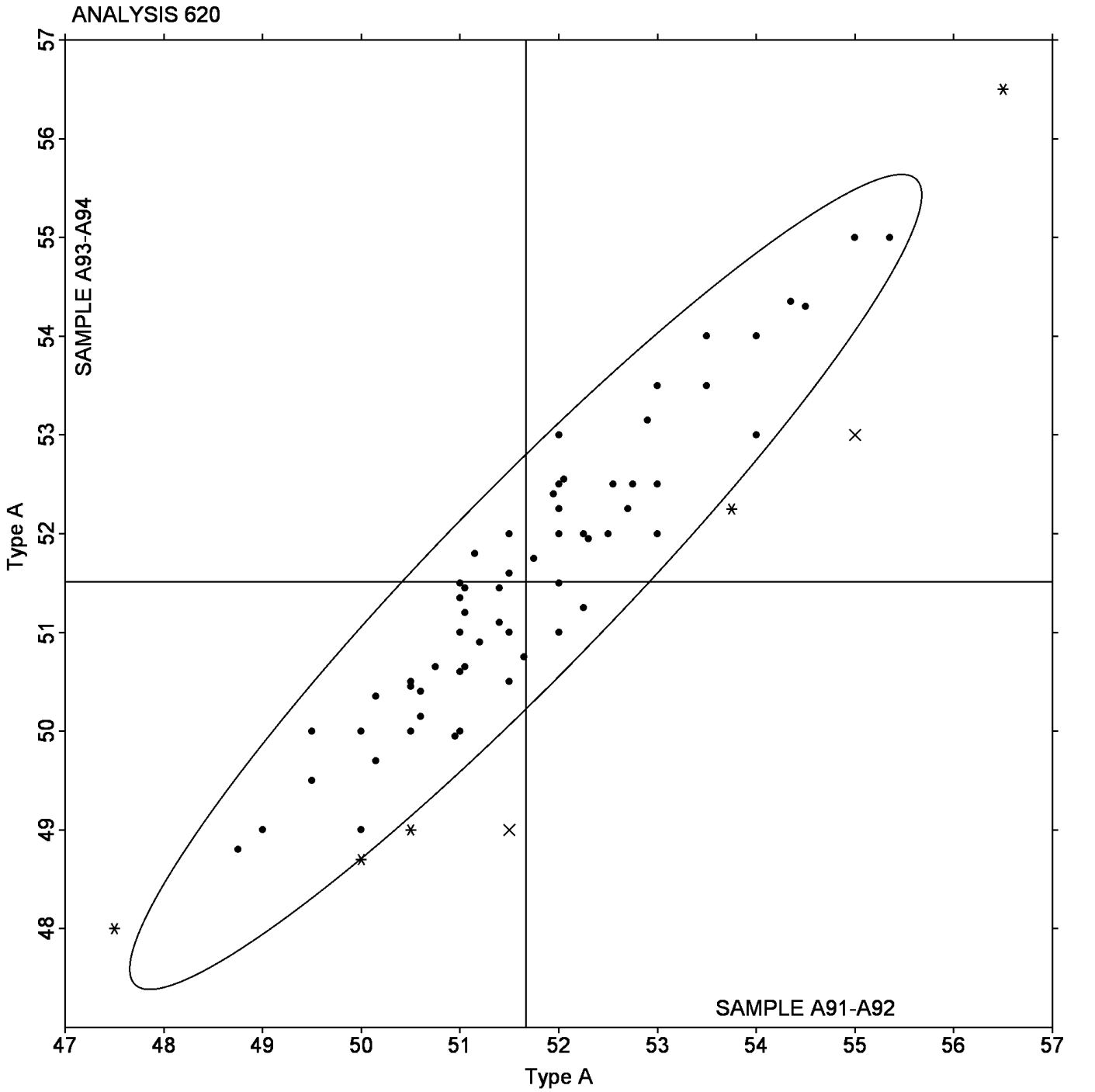
Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample **A91-A92** = 51.665 Type A

Grand Mean Sample **A93-A94** = 51.512 Type A



Rubber Interlaboratory Testing Program

Analysis 630

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

		Sample A91-A92			Sample J91-J92			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
22JGSX		3,752.5	350.4	1.78	3,432.0	146.7	0.88	ZZ
22W9AT		3,224.5	-177.6	-0.90	3,269.5	-15.8	-0.09	ZZ
5AUR76		3,483.0	80.9	0.41	3,362.0	76.7	0.46	ZZ
5SSUQH		3,348.5	-53.6	-0.27	3,230.5	-54.8	-0.33	ZZ
5VHV8C		3,315.0	-87.1	-0.44	3,047.5	-237.8	-1.42	ZZ
6BY62Y		3,541.9	139.8	0.71	3,450.6	165.3	0.99	ZZ
83CF6X		3,461.0	58.9	0.30	3,382.0	96.7	0.58	ZZ
888PPG		3,865.3	463.2	2.36	3,560.7	275.4	1.65	ZZ
CSAX46		3,341.5	-60.6	-0.31	3,024.5	-260.8	-1.56	ZZ
DK23E3		3,429.8	27.7	0.14	3,280.6	-4.7	-0.03	ZZ
E3V2Z7	X	3,324.8	-77.3	-0.39	2,635.0	-650.3	-3.89	ZZ
ECCT9X		3,403.5	1.4	0.01	3,262.5	-22.8	-0.14	ZZ
EGDDAA		3,447.0	44.9	0.23	3,344.5	59.2	0.35	ZZ
G73DVG	*	2,826.5	-575.6	-2.93	2,780.5	-504.8	-3.02	ZZ
GX3G9W		3,310.0	-92.1	-0.47	3,103.0	-182.3	-1.09	ZZ
K2G46X		3,533.5	131.4	0.67	3,486.5	201.2	1.20	ZZ
KD94Q7		3,086.2	-315.9	-1.61	3,288.7	3.4	0.02	ZZ
L1M4YX		3,433.0	30.9	0.16	3,326.5	41.2	0.25	ZZ
NUE6EJ		3,553.7	151.6	0.77	3,471.8	186.5	1.12	ZZ
PC32G5		3,466.4	64.3	0.33	3,227.1	-58.2	-0.35	ZZ
PD5KXU		3,223.5	-178.6	-0.91	3,083.0	-202.3	-1.21	ZZ
PHL94X		3,227.6	-174.5	-0.89	3,354.4	69.1	0.41	ZZ
RNYXHX		3,509.5	107.4	0.55	3,190.0	-95.3	-0.57	ZZ
T64GH1		3,502.3	100.2	0.51	3,351.7	66.4	0.40	ZZ
TSGSC8		3,498.4	96.3	0.49	3,398.9	113.6	0.68	ZZ
TZ4MKS		3,324.0	-78.1	-0.40	3,265.5	-19.8	-0.12	ZZ
VFYF7U		3,416.0	13.9	0.07	3,349.5	64.2	0.38	ZZ
X142B6		3,332.5	-69.6	-0.35	3,378.5	93.2	0.56	ZZ

Summary Statistics

	Sample A91-A92	Sample J91-J92
Grand Means	3,402.09 psi	3,285.28 psi
Stnd Dev Btwn Labs	196.57 psi	167.04 psi

Statistics based on 27 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 630

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

Summary Statistics in SI Units

Grand Means				
	23.456	MPa	22.65	MPa
Stnd Dev Btwn Labs				
	1.355	MPa	1.15	MPa

Statistics based on 27 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #630

E3V2Z7 (X) - Inconsistency in testing between Sample sets. Data for Sample set J91-J92 are low.

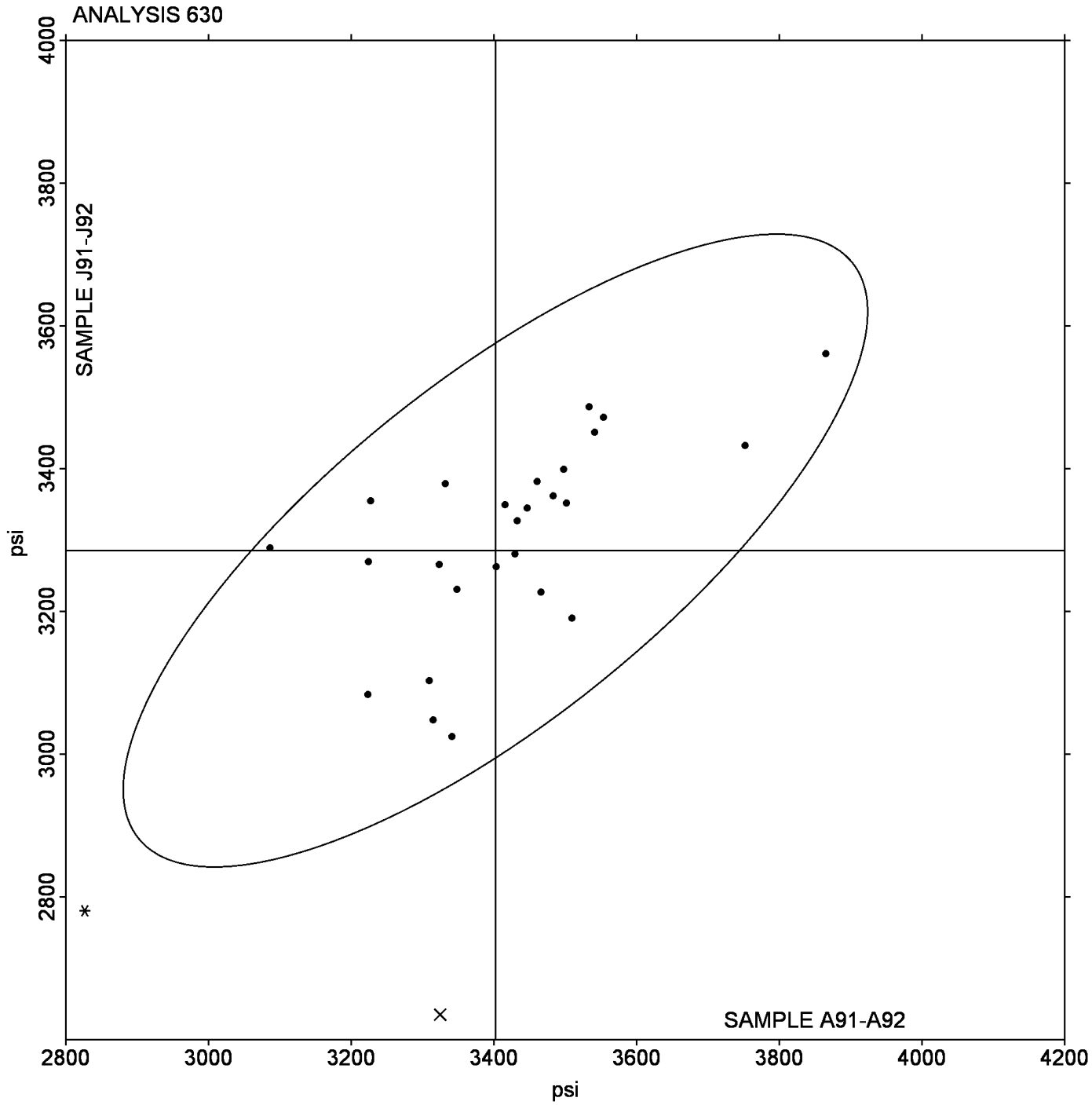
Rubber Interlaboratory Testing Program

Analysis 630

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

Grand Mean Sample **A91-A92** = 3,402.09 psi

Grand Mean Sample **J91-J92** = 3,285.28 psi



Rubber Interlaboratory Testing Program

Analysis 631

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

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample J91-J92 Lab Mean	Sample J91-J92 Diff from Grand Mean	Sample J91-J92 CPV	Instr Code
35RBJM		639.5	31.0	0.99	623.0	26.0	1.01	ZZ
4LKBBZ		634.5	26.0	0.83	619.0	22.0	0.86	ZZ
4T7HCX		599.5	-9.0	-0.29	596.5	-0.5	-0.02	ZZ
5P9BE7		583.0	-25.5	-0.81	573.5	-23.5	-0.91	ZZ
5THV3D		616.0	7.5	0.24	608.0	11.0	0.43	ZZ
6ARRUT		591.9	-16.6	-0.53	573.8	-23.1	-0.90	ZZ
6FNFEH		654.0	45.5	1.45	656.5	59.5	2.31	ZZ
7Y1RT8		606.5	-2.0	-0.06	598.0	1.0	0.04	ZZ
8DTB5P		626.5	18.0	0.57	602.5	5.5	0.22	ZZ
99KPA5		603.0	-5.5	-0.17	589.5	-7.5	-0.29	ZZ
BKYWH9		590.0	-18.5	-0.59	560.0	-37.0	-1.44	ZZ
DXZQ22		545.2	-63.3	-2.01	557.3	-39.7	-1.54	ZZ
FR1834		598.5	-10.0	-0.32	602.0	5.0	0.20	ZZ
HNV23P		626.0	17.5	0.56	601.5	4.5	0.18	ZZ
LS2QCV		576.0	-32.5	-1.03	557.5	-39.5	-1.53	ZZ
Q8DUXQ		601.0	-7.5	-0.24	595.5	-1.5	-0.06	ZZ
R6R2SJ		631.5	23.0	0.73	619.5	22.5	0.88	ZZ
RRU99X		608.5	0.0	0.00	618.5	21.5	0.84	ZZ
RZFYFX		608.5	0.0	0.00	603.5	6.5	0.25	ZZ
SB35T5		598.0	-10.5	-0.33	594.5	-2.5	-0.10	ZZ
VFHW9X		583.5	-25.0	-0.79	593.0	-4.0	-0.15	ZZ
X67XHU		634.9	26.4	0.84	600.0	3.0	0.12	ZZ
XH4X64	*	678.5	70.0	2.23	617.0	20.0	0.78	ZZ
XJJKXB		547.0	-61.5	-1.95	541.0	-56.0	-2.18	ZZ
XSK8C2		604.8	-3.7	-0.12	584.8	-12.2	-0.47	ZZ
YX3HTK		616.0	7.5	0.24	602.0	5.0	0.20	ZZ
ZA13AU		568.5	-40.0	-1.27	582.0	-15.0	-0.58	ZZ
ZNTFX6		666.9	58.4	1.86	645.2	48.3	1.88	ZZ

Summary Statistics

	Sample A91-A92	Sample J91-J92
Grand Means	608.49 percent	596.97 percent
Stnd Dev Btwn Labs	31.46 percent	25.72 percent

Statistics based on 28 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

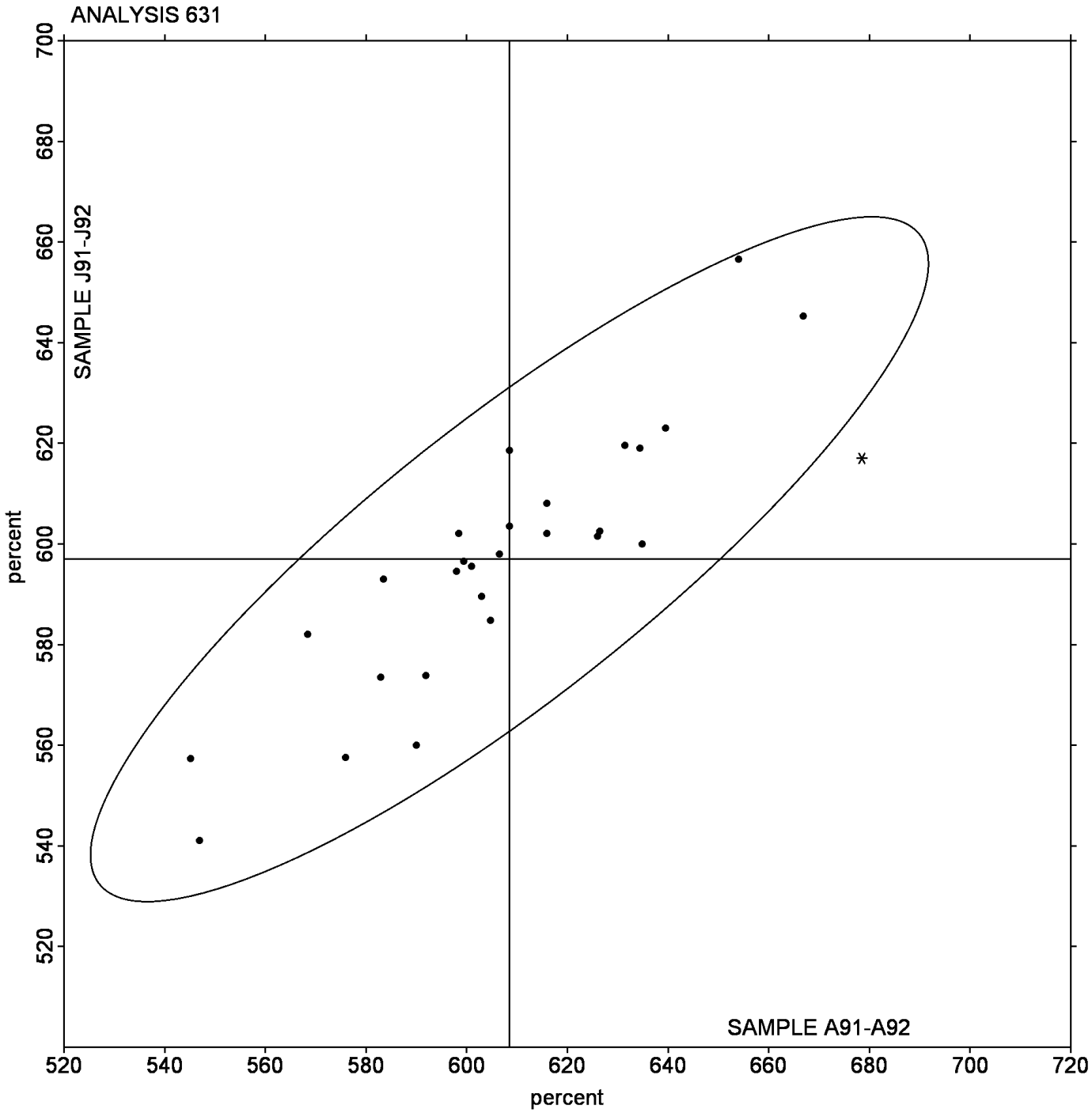
Rubber Interlaboratory Testing Program

Analysis 631

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

Grand Mean Sample **A91-A92** = 608.49 percent

Grand Mean Sample **J91-J92** = 596.97 percent



Rubber Interlaboratory Testing Program

Analysis 632

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

		Sample A91-A92			Sample J91-J92			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
22R3EB		993.1	-58.8	-0.65	1,040.3	9.4	0.11	ZZ
2NG5WY		972.0	-79.8	-0.88	1,000.0	-30.9	-0.37	ZZ
33TAWG		1,046.0	-5.8	-0.06	1,029.5	-1.4	-0.02	ZZ
5Z4QAV		865.0	-186.8	-2.06	812.0	-218.9	-2.62	ZZ
64B2FJ		1,051.5	-0.3	0.00	1,043.0	12.1	0.15	ZZ
6P7TCG		1,031.5	-20.3	-0.22	973.5	-57.4	-0.69	ZZ
6WEUW4	*	1,309.0	257.2	2.84	1,167.5	136.6	1.64	ZZ
7RGNM6		1,066.5	14.7	0.16	1,014.0	-16.9	-0.20	ZZ
APYLLA		1,080.0	28.2	0.31	1,057.5	26.6	0.32	ZZ
FPUQ48	X	1,059.5	7.7	0.08	778.0	-252.9	-3.03	ZZ
FXBGDY		1,036.5	-15.3	-0.17	1,018.5	-12.4	-0.15	ZZ
G8APEF		1,156.7	104.9	1.16	979.0	-51.8	-0.62	ZZ
J6R7Y8		1,089.2	37.4	0.41	1,027.6	-3.3	-0.04	ZZ
JJ7NJ2		1,014.7	-37.1	-0.41	1,087.8	56.9	0.68	ZZ
K5EYW6		1,023.0	-28.9	-0.32	1,037.9	7.0	0.08	ZZ
KBRCYD		1,009.0	-42.8	-0.47	1,018.0	-12.9	-0.15	ZZ
LGXTBD		1,132.9	81.0	0.90	1,127.6	96.7	1.16	ZZ
LMJ6RM		1,054.5	2.7	0.03	1,018.0	-12.9	-0.15	ZZ
LTNP1C		988.1	-63.8	-0.70	969.1	-61.8	-0.74	ZZ
MMKVU		1,141.0	89.2	0.99	1,064.0	33.1	0.40	ZZ
N6AF4T		1,101.5	49.7	0.55	1,089.0	58.1	0.70	ZZ
NL7KPJ		977.0	-74.8	-0.83	944.5	-86.4	-1.04	ZZ
QEVADT		1,059.5	7.7	0.08	1,001.5	-29.4	-0.35	ZZ
QY5WU		947.5	-104.3	-1.15	955.5	-75.4	-0.90	ZZ
TF5ACV		904.0	-147.8	-1.63	883.0	-147.9	-1.77	ZZ
THS4EK		1,082.7	30.9	0.34	1,156.4	125.5	1.51	ZZ
XLNURL		1,205.0	153.2	1.69	1,160.0	129.1	1.55	ZZ
XT9WH5		1,062.0	10.2	0.11	1,158.5	127.6	1.53	ZZ

Summary Statistics

	Sample A91-A92	Sample J91-J92
Grand Means	1,051.82 psi	1,030.86 psi
Stnd Dev Btwn Labs	90.51 psi	83.38 psi

Statistics based on 27 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 632

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

Summary Statistics in SI Units

Grand Means				
	7.2520	MPa	7.11	MPa
Stnd Dev Btwn Labs				
	0.6240	MPa	0.57	MPa

Statistics based on 27 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #632

FPUQ48 (X) - Inconsistency in testing between Sample sets. Data for Sample set J91-J92 are low.

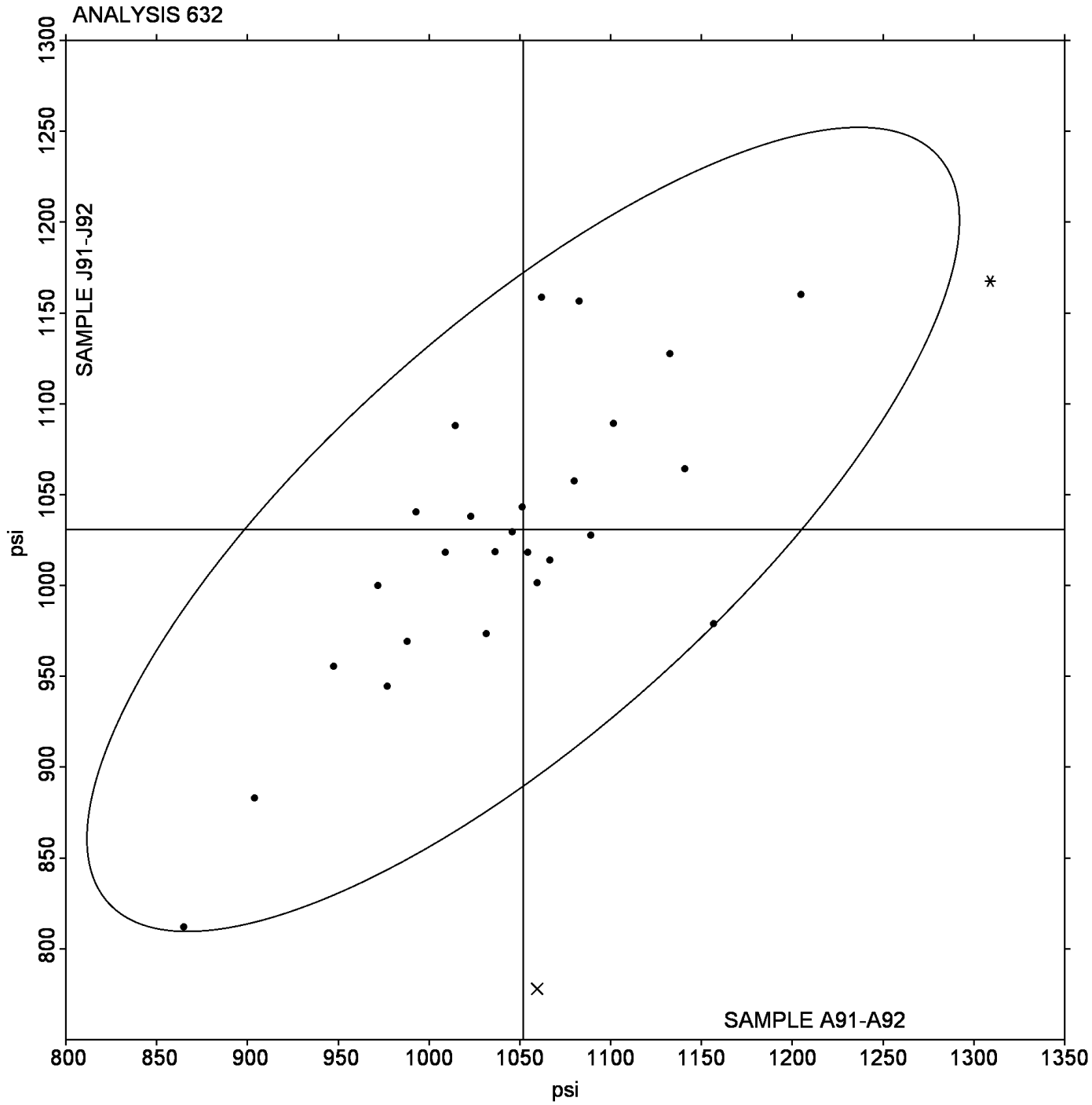
Rubber Interlaboratory Testing Program

Analysis 632

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

Grand Mean Sample **A91-A92** = 1,051.82 psi

Grand Mean Sample **J91-J92** = 1,030.86 psi



Rubber Interlaboratory Testing Program

Analysis 633

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

WebCode	Data Flag	Sample A91-A92 Lab Mean	Sample A91-A92 Diff from Grand Mean	Sample A91-A92 CPV	Sample J91-J92 Lab Mean	Sample J91-J92 Diff from Grand Mean	Sample J91-J92 CPV	Instr Code
2XUW2M		204.5	-23.7	-1.71	213.5	-13.7	-0.70	ZZ
3URXA9		238.5	10.3	0.74	230.0	2.8	0.14	ZZ
4M592P		252.4	24.2	1.74	232.8	5.6	0.29	ZZ
5PZ98F		231.2	3.0	0.22	250.8	23.5	1.21	ZZ
88NFLP		220.0	-8.2	-0.59	226.0	-1.2	-0.06	ZZ
8NWM9B		232.5	4.3	0.31	249.0	21.8	1.12	ZZ
9MM8Q		231.0	2.8	0.20	257.5	30.3	1.55	ZZ
9XEVK6		239.5	11.3	0.82	239.0	11.8	0.60	ZZ
BET1Y9		232.5	4.3	0.31	230.0	2.8	0.14	ZZ
C4RHU5		207.5	-20.7	-1.49	209.5	-17.7	-0.91	ZZ
CWDHF		239.0	10.8	0.78	245.5	18.3	0.94	ZZ
G7ZMTG		240.0	11.8	0.85	203.1	-24.2	-1.24	ZZ
GY26VW		231.5	3.3	0.24	226.0	-1.2	-0.06	ZZ
H9EN18		223.1	-5.1	-0.37	232.9	5.7	0.29	ZZ
KHS3EN		255.0	26.8	1.93	229.0	1.8	0.09	ZZ
LKMGZR		229.6	1.4	0.10	248.1	20.8	1.07	ZZ
MK6PV1		221.5	-6.7	-0.48	227.5	0.3	0.01	ZZ
NAH4D9		220.5	-7.7	-0.56	228.0	0.8	0.04	ZZ
PEHCSW		227.5	-0.7	-0.05	217.5	-9.7	-0.50	ZZ
PYU4P7		230.5	2.3	0.17	235.0	7.8	0.40	ZZ
T4PHL4		240.6	12.4	0.89	242.3	15.1	0.77	ZZ
UC9ZPA		210.5	-17.7	-1.28	208.0	-19.2	-0.99	ZZ
VNKJ36		233.5	5.3	0.38	239.5	12.3	0.63	ZZ
WAULW	*	192.5	-35.7	-2.58	185.5	-41.7	-2.14	ZZ
WPSY9B		237.5	9.3	0.67	235.0	7.8	0.40	ZZ
WV1SLT	*	218.8	-9.5	-0.68	168.5	-58.7	-3.01	ZZ
ZB3H8E		215.6	-12.6	-0.91	232.9	5.7	0.29	ZZ
ZNETNJ		233.0	4.8	0.35	220.0	-7.2	-0.37	ZZ

Summary Statistics

	Sample A91-A92	Sample J91-J92
Grand Means	228.20 psi	227.22 psi
Stnd Dev Btwn Labs	13.85 psi	19.49 psi

Statistics based on 28 of 28 reporting participants

Rubber Interlaboratory Testing Program

Analysis 633

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

Summary Statistics in SI Units

Grand Means				
	1.5734	MPa	1.57	MPa
Stnd Dev Btwn Labs				
	0.0955	MPa	0.13	MPa

Statistics based on 28 of 28 reporting participants

All samples : Polyisoprene compound, batch #1

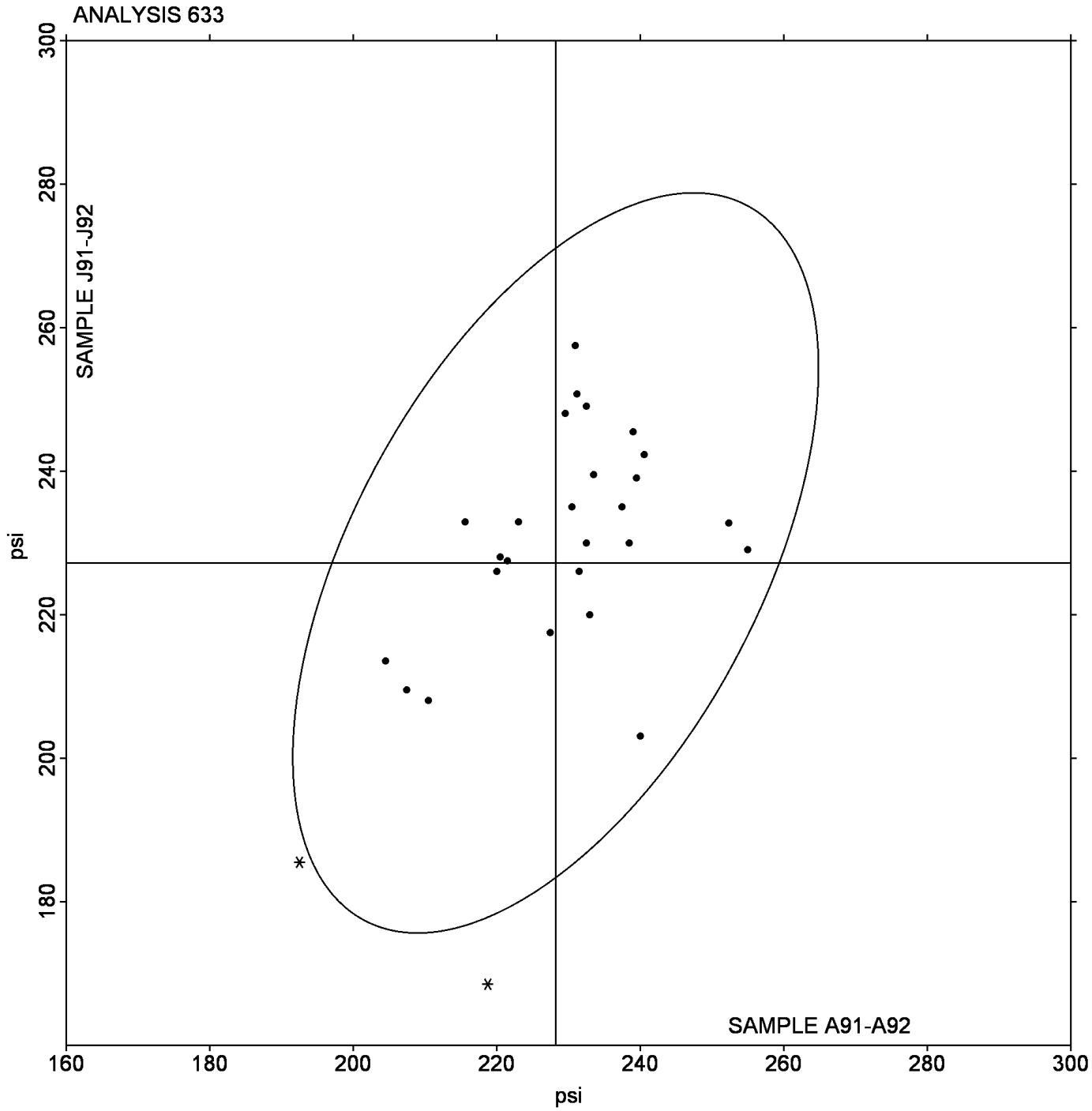
Rubber Interlaboratory Testing Program

Analysis 633

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

Grand Mean Sample **A91-A92** = 228.20 psi

Grand Mean Sample **J91-J92** = 227.22 psi



Rubber Interlaboratory Testing Program

Analysis 660

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

		Sample S91-S92			Sample S93-S94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
2G9MMZ		46.92	0.17	0.26	46.55	-0.05	-0.08	XX
3VRWQF	X	44.77	-1.98	-3.10	47.31	0.71	1.09	XX
4HSHVJ		47.92	1.17	1.84	48.10	1.50	2.30	MR
6U9J7A		46.89	0.14	0.22	46.47	-0.13	-0.20	TV
6Z3KK8		45.48	-1.27	-1.99	45.40	-1.20	-1.85	MR
7QFDBN		46.75	0.00	0.00	46.52	-0.09	-0.13	MR
84TPCS		46.15	-0.60	-0.94	45.72	-0.89	-1.36	MR
9MLFSP		46.91	0.16	0.25	46.28	-0.32	-0.49	TV
A99EMH		46.95	0.20	0.32	46.90	0.30	0.46	MR
AL9MMT		47.27	0.52	0.81	47.02	0.41	0.64	MR
AUBGAL		47.67	0.92	1.44	47.42	0.81	1.25	MR
BDXCKK		46.78	0.03	0.05	46.40	-0.20	-0.31	MR
BGT356		46.86	0.11	0.17	46.70	0.09	0.14	MR
CU1WKP		46.73	-0.02	-0.02	46.78	0.18	0.28	MR
DELR2T		46.55	-0.20	-0.31	46.35	-0.25	-0.39	MR
ESBS67		47.92	1.17	1.84	47.50	0.90	1.38	MZ
FFJTK1		48.10	1.35	2.12	48.28	1.68	2.58	MP
JXW257		47.08	0.33	0.53	46.37	-0.24	-0.36	MR
KPNP18		46.00	-0.75	-1.18	46.48	-0.12	-0.18	MR
KTEW8X		46.60	-0.15	-0.23	46.18	-0.42	-0.64	MR
KZKMR	*	46.38	-0.37	-0.57	47.18	0.58	0.89	MR
MG5EWS	X	44.70	-2.05	-3.22	43.78	-2.82	-4.33	MR
N619CU		46.23	-0.52	-0.81	46.11	-0.49	-0.76	MR
Q22K54		47.12	0.37	0.58	46.77	0.16	0.25	MR
R6GSGZ		47.22	0.47	0.74	47.08	0.48	0.74	MR
S6PM15		46.65	-0.10	-0.15	46.62	0.01	0.02	MR
SF1L7M		46.62	-0.13	-0.21	46.52	-0.09	-0.13	MR
SU6GVA		46.08	-0.67	-1.05	45.78	-0.82	-1.26	MR
UZYWPT		45.80	-0.95	-1.49	45.73	-0.87	-1.33	MR
VBS9Z9		46.87	0.12	0.19	46.50	-0.10	-0.16	MR
VTU3J5		46.33	-0.42	-0.65	45.97	-0.64	-0.98	MR
XCTPXK		45.59	-1.16	-1.83	46.02	-0.58	-0.89	MM
XJKBC7		46.80	0.05	0.08	46.98	0.38	0.58	MR

Rubber Interlaboratory Testing Program

Analysis 660

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

Summary Statistics

Grand Means			
	46.748 ML 1 + 4		46.603 ML 1 + 4
Stnd Dev Btwn Labs			
	0.637 ML 1 + 4		0.651 ML 1 + 4

Statistics based on 31 of 33 reporting participants

Samples S91-S92: SBR & S93-S94: Butyl

Comments on assigned Data Flags for Test #660

3VRWQF (X) - Inconsistency in testing between Sample sets. Data for Sample sets S91-S92 are low.

MG5EWS (X) - Data for all Samples are low.

Instrument Code Listing

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

Instruments:

(ML) Alpha Technologies/Monsanto model not specified

(MP) Monsanto Compact Mooney Viscometer

(MZ) Rebuilt Monsanto Mooney Viscometer

(TV) Tech Pro Visc Tech (any model)

(XX) Instrument make/model not specified by lab

(MM) Alpha Technologies Model 1xxx or OSM

(MR) Alpha Technologies Model MV2000/MV2000E

(SF) Scott STI (any model)

(XA) Special In-House Instrument

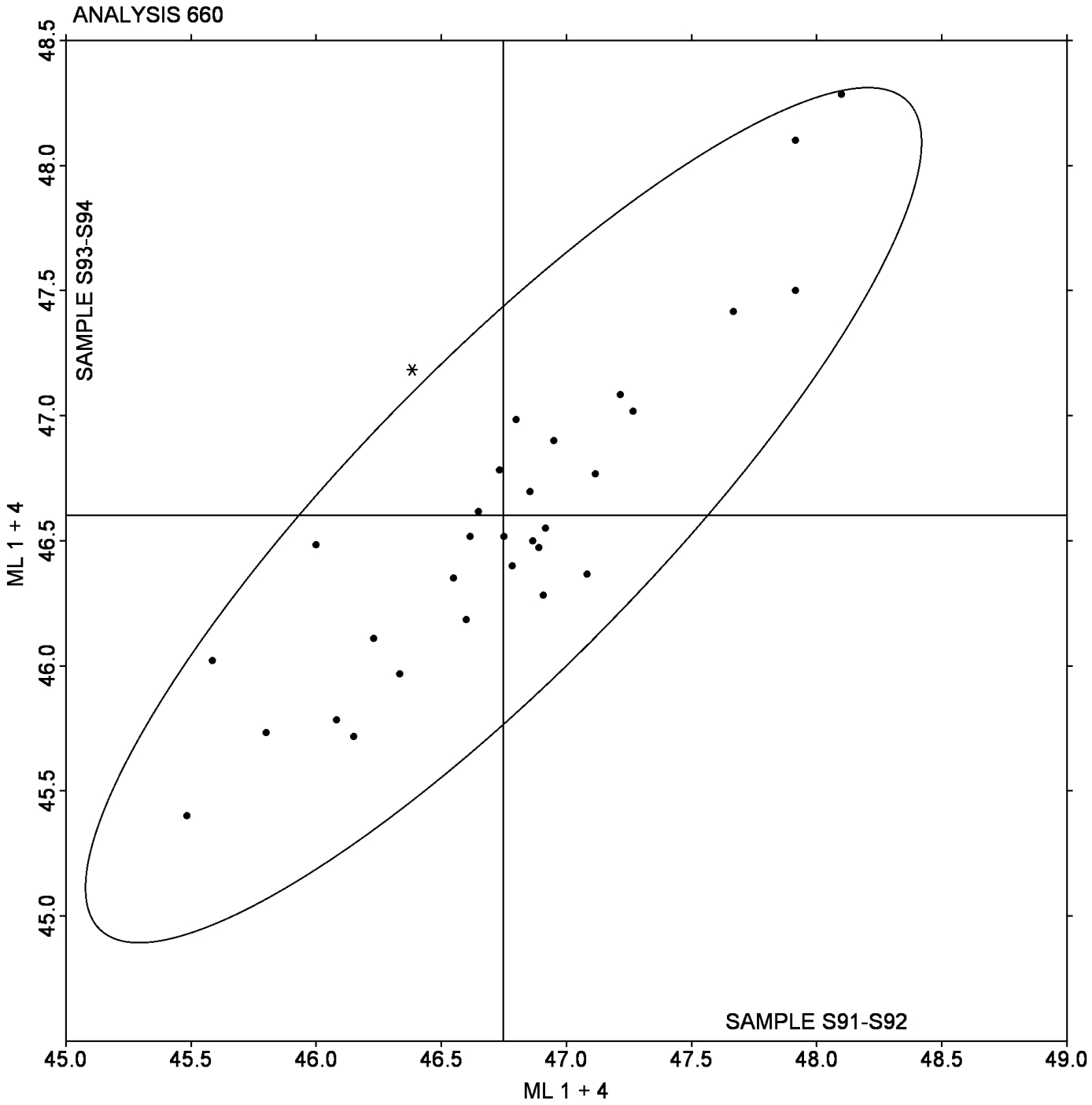
Rubber Interlaboratory Testing Program

Analysis 660

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

Grand Mean Sample **S91-S92** = 46.748 ML 1 + 4

Grand Mean Sample **S93-S94** = 46.603 ML 1 + 4



Rubber Interlaboratory Testing Program

Analysis 661

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

		Sample S91-S92			Sample S93-S94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1NN9D8		46.75	-0.02	-0.03	44.03	-0.94	-1.39	MR
2YW5GL	X	44.77	-2.00	-3.13	45.64	0.67	0.98	XX
61MY5Y		46.38	-0.39	-0.60	45.35	0.38	0.55	MR
62GZEM		46.78	0.01	0.02	44.82	-0.16	-0.23	MR
6SJ3RS		46.33	-0.44	-0.68	44.45	-0.52	-0.77	MR
7PFD14		46.65	-0.12	-0.19	45.02	0.04	0.06	MR
7WHDZY		47.08	0.31	0.49	45.07	0.09	0.14	MR
8F225H		46.95	0.18	0.28	45.45	0.48	0.70	MR
8LXYF9		48.10	1.33	2.09	46.03	1.06	1.56	MM
B1L1H4		46.60	-0.17	-0.26	44.65	-0.32	-0.48	MR
BZ53BR		46.87	0.10	0.15	44.32	-0.66	-0.97	MR
CVXC14		46.23	-0.54	-0.84	44.62	-0.35	-0.52	MR
FPWUXP		47.27	0.50	0.78	45.65	0.68	0.99	MR
G6QRBJ		46.91	0.14	0.22	45.22	0.24	0.36	TV
HJRHKG		47.67	0.90	1.41	45.95	0.98	1.44	MR
HKYXRN		46.55	-0.22	-0.34	45.07	0.09	0.14	MR
JRJ8M4		45.80	-0.97	-1.52	44.15	-0.82	-1.21	MR
KCD7AR		45.59	-1.18	-1.85	43.48	-1.49	-2.20	MM
KQP3Q9	*	47.92	1.15	1.80	45.10	0.13	0.18	MZ
M9LBQP	X	44.70	-2.07	-3.24	41.85	-3.12	-4.60	MR
RGNFW3		46.00	-0.77	-1.21	44.38	-0.59	-0.87	MR
RTFWPD		46.08	-0.69	-1.08	44.17	-0.81	-1.19	MR
S5YTNE		45.48	-1.29	-2.02	43.98	-0.99	-1.46	MR
UDJA5Z		47.22	0.45	0.70	45.87	0.89	1.31	MR
UMSDX1		46.92	0.15	0.23	45.12	0.14	0.21	XX
VDVV5H		46.89	0.12	0.19	44.84	-0.14	-0.21	XX
WH99R8		46.80	0.03	0.05	45.73	0.76	1.12	MR
WPYK9J		46.62	-0.15	-0.24	44.87	-0.11	-0.16	MR
XCJ5CQ		47.92	1.15	1.80	46.42	1.44	2.12	MR
YMNA8C		46.86	0.09	0.14	45.10	0.13	0.19	MR
YZTG94		46.73	-0.04	-0.05	45.35	0.38	0.55	MR
Z9M3DU		47.12	0.35	0.55	45.00	0.03	0.04	MR

Rubber Interlaboratory Testing Program

Analysis 661

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

Summary Statistics

Grand Means			
46.768	ML 1 + 8	44.975	ML 1 + 8
Stnd Dev Btwn Labs			
0.637	ML 1 + 8	0.679	ML 1 + 8

Statistics based on 30 of 32 reporting participants

Please refer to the sample information provided for Analysis 660.

Comments on assigned Data Flags for Test #661

2YW5GL (X) - Inconsistency in testing between Sample sets. Data for Sample set S91-S92 are low.

M9LBQP (X) - Data for all Samples are low.

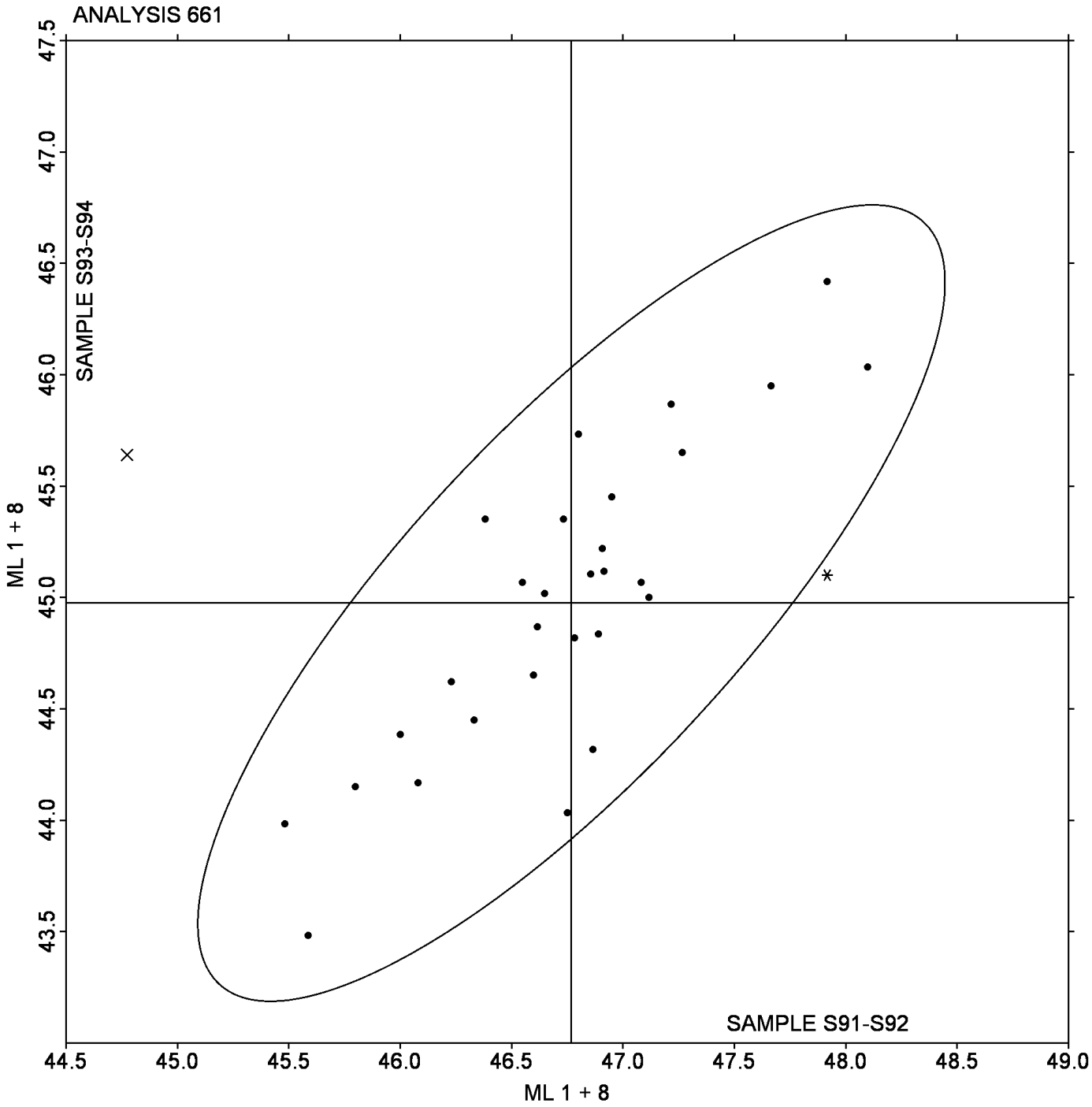
Rubber Interlaboratory Testing Program

Analysis 661

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

Grand Mean Sample **S91-S92** = 46.768 ML 1 + 8

Grand Mean Sample **S93-S94** = 44.975 ML 1 + 8



Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

		Sample S91-S92			Sample S93-S94			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
14HQL8		10.74	-0.22	-0.30	4.685	0.042	0.17	MR
1FM2F9		10.72	-0.24	-0.33	4.560	-0.083	-0.33	MR
5Z8HHY		11.53	0.58	0.80	5.000	0.357	1.41	MR
A6FC1V	X	312.00	301.04	416.09	544.700	540.057	2,135.10	MR
GEYN95	X	85.14	74.18	102.54	10.100	5.457	21.57	XX
GSKZLE		9.60	-1.36	-1.88	4.200	-0.443	-1.75	XX
RCG74M		11.04	0.08	0.11	4.513	-0.130	-0.51	MR
TY4RVU		11.23	0.28	0.38	4.800	0.157	0.62	MR
YTAD21		11.84	0.88	1.22	4.743	0.100	0.40	XX

Summary Statistics

	Sample S91-S92	Sample S93-S94
Grand Means	10.957 seconds	4.6431 seconds
Stnd Dev Btwn Labs	0.724 seconds	0.2529 seconds

Statistics based on 7 of 9 reporting participants

Samples S91-S92: SBR & S93-S94: Butyl

Comments on assigned Data Flags for Test #662

A6FC1V (X) - Extreme data for both Sample sets. Lab indicated reporting in minutes, but data appear to be in seconds. Samples may also have been switched between replicates.

GEYN95 (X) - Data for all Samples are high.

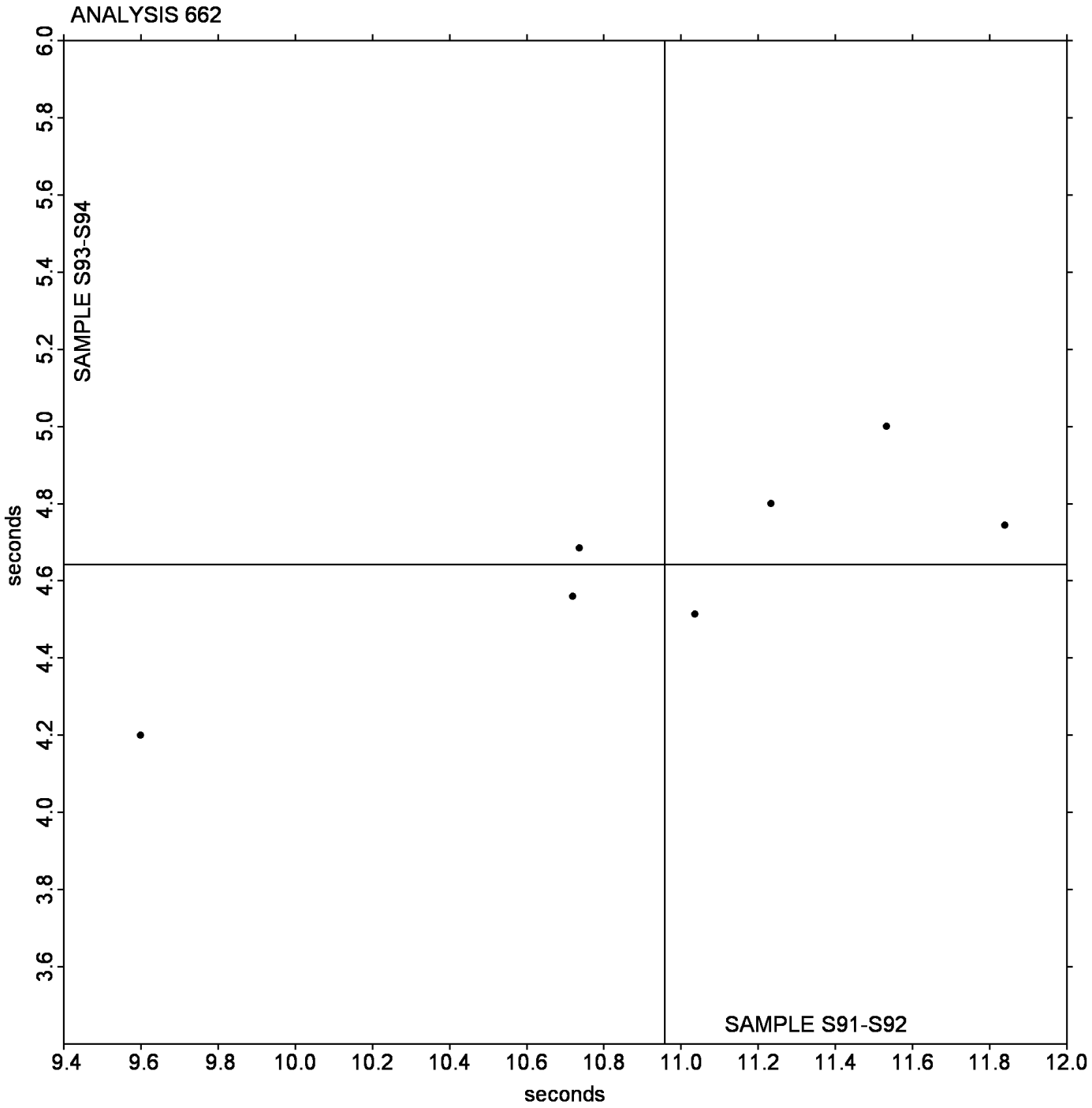
Rubber Interlaboratory Testing Program

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

Grand Mean Sample **S91-S92** = 10.957 seconds

Grand Mean Sample **S93-S94** = 4.6431 seconds



Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample S91-S92 Lab Mean	Sample S91-S92 Diff from Grand Mean	Sample S91-S92 CPV	Sample S93-S94 Lab Mean	Sample S93-S94 Diff from Grand Mean	Sample S93-S94 CPV	Instr Code
47AQL1		86.18	1.37	0.26	97.26	1.23	0.60	MR
4HZES2		70.84	-13.97	-2.66	90.68	-5.35	-2.61	XX
91UWAS		85.81	1.00	0.19	96.00	-0.03	-0.01	XX
GL1WDC		87.52	2.71	0.52	97.20	1.18	0.57	XX
LFL3ZN		86.76	1.95	0.37	96.17	0.14	0.07	MR
Q14WEJ		86.83	2.03	0.38	96.87	0.85	0.41	MR
QENA2R		86.65	1.85	0.35	96.90	0.88	0.43	MR
Y3Q3UZ		86.48	1.68	0.32	96.58	0.56	0.27	MR
YT2V32		86.18	1.38	0.26	96.57	0.54	0.26	MR

Summary Statistics

	Sample S91-S92	Sample S93-S94
Grand Means	84.804 percent	96.024 percent
Stnd Dev Btwn Labs	5.261 percent	2.050 percent

Statistics based on 9 of 9 reporting participants

Samples S91-S92: SBR & S93-S94: Butyl

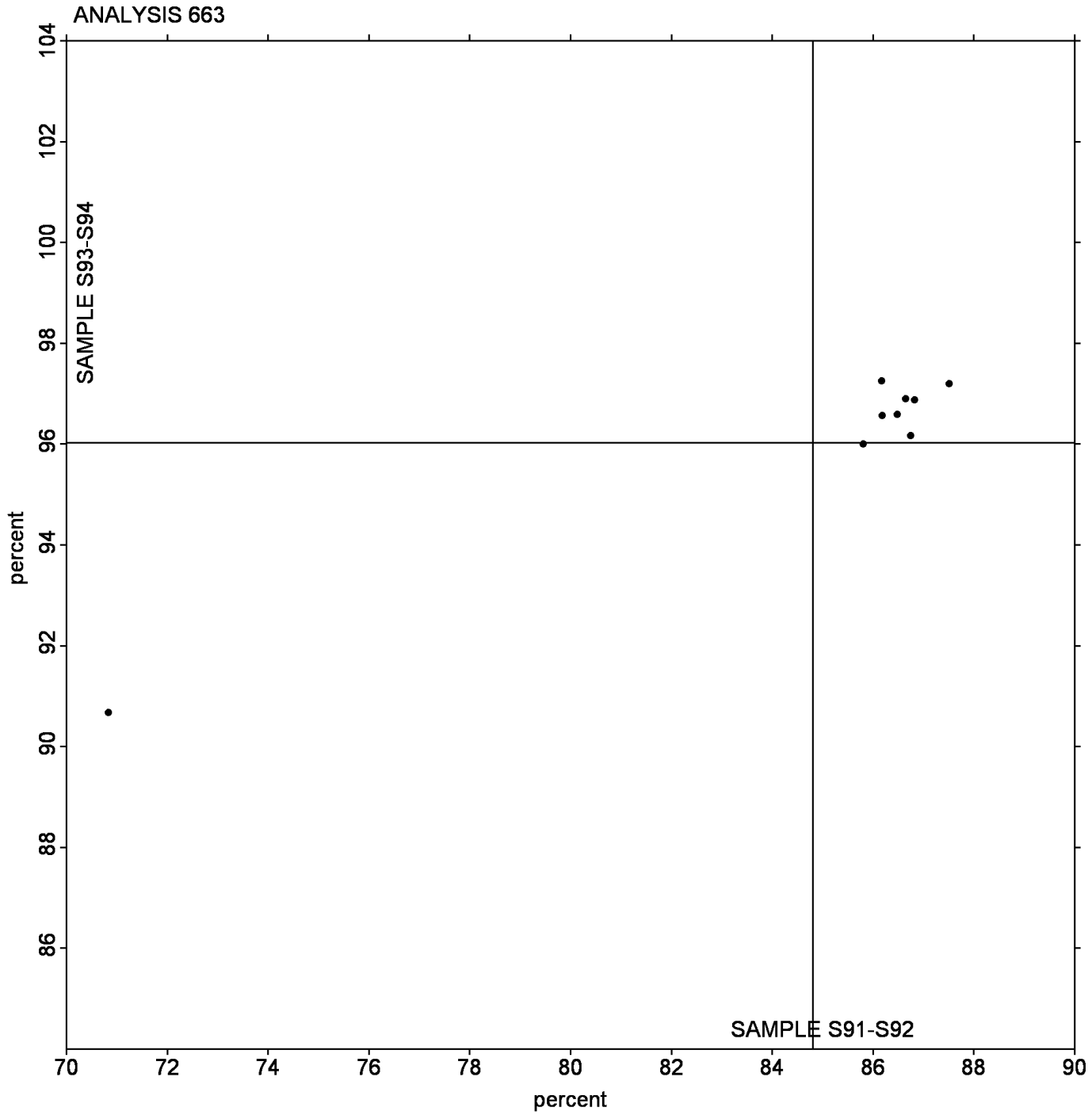
Rubber Interlaboratory Testing Program

Analysis 663

Mooney Stress Relaxation: X30 (percent)

Grand Mean Sample **S91-S92** = 84.804 percent

Grand Mean Sample **S93-S94** = 96.024 percent



Rubber Interlaboratory Testing Program

Analysis 664

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

WebCode	Data Flag	Sample S91-S92 Lab Mean	Sample S91-S92 Diff from Grand Mean	Sample S91-S92 CPV	Sample S93-S94 Lab Mean	Sample S93-S94 Diff from Grand Mean	Sample S93-S94 CPV	Instr Code
3VNCP6		718.6	16.9	0.29	231.9	19.4	0.40	XX
5RHWB1		702.8	1.2	0.02	209.5	-3.0	-0.06	MR
69YULR		626.9	-74.8	-1.29	162.1	-50.4	-1.04	XX
8BAL3Q		680.1	-21.6	-0.37	201.0	-11.6	-0.24	MR
KDLBQP		698.5	-3.2	-0.05	158.1	-54.4	-1.12	MR
SC149M		669.6	-32.1	-0.55	223.3	10.8	0.22	MR
UK2GRK	X	94.3	-607.3	-10.45	60.3	-152.2	-3.14	XX
WH3TY9		815.2	113.5	1.95	301.7	89.2	1.84	XX

Summary Statistics

	Sample S91-S92	Sample S93-S94
Grand Means	701.67 M-s	212.51 M-s
Stnd Dev Btwn Labs	58.13 M-s	48.47 M-s

Statistics based on 7 of 8 reporting participants

Samples S91-S92: SBR & S93-S94: Butyl

Comments on assigned Data Flags for Test #664

UK2GRK (X) - Data for all Samples are low.

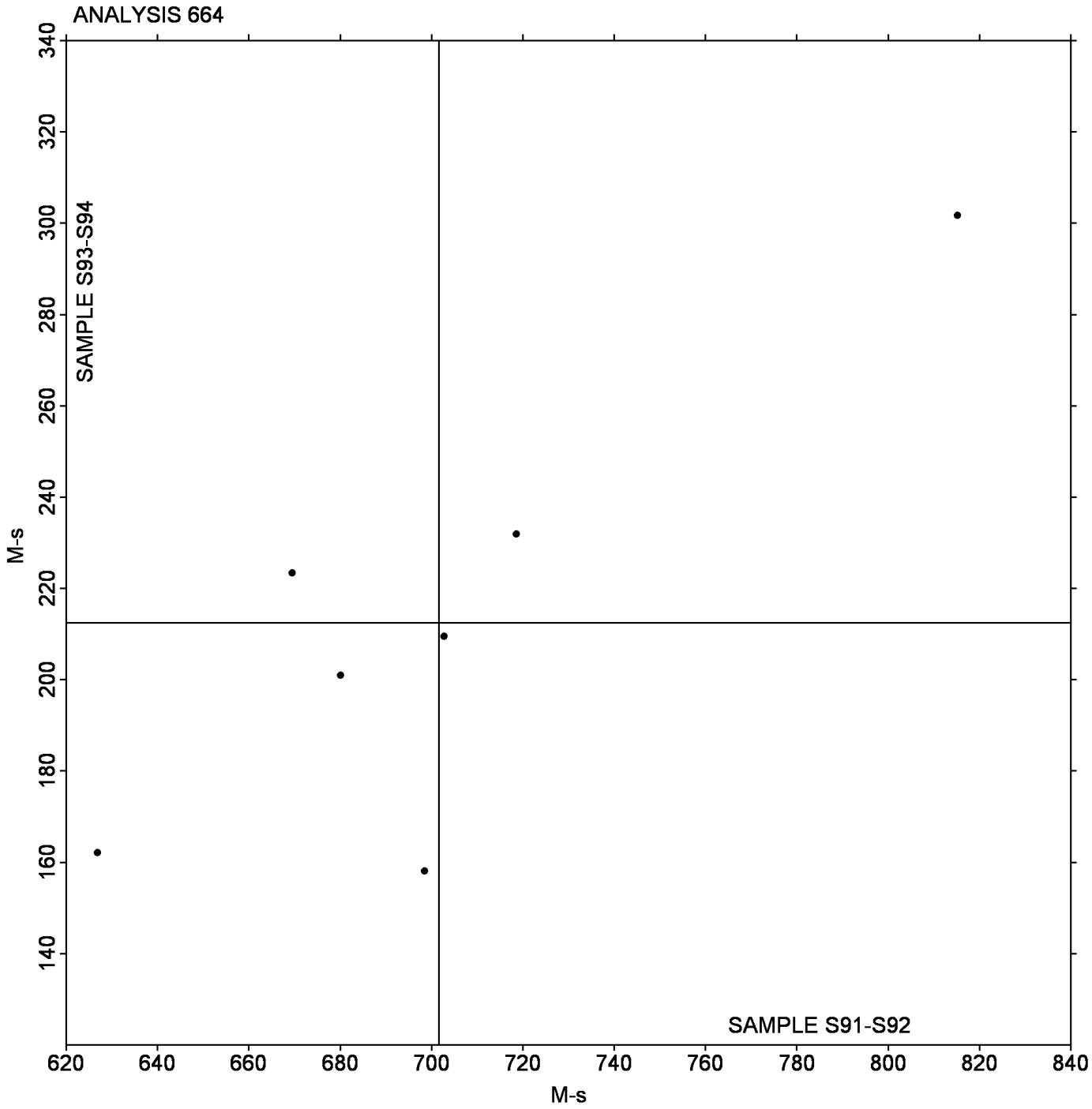
Rubber Interlaboratory Testing Program

Analysis 664

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

Grand Mean Sample **S91-S92** = 701.67 M-s

Grand Mean Sample **S93-S94** = 212.51 M-s



Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Sample W91-W92 Diff from Grand Mean	Sample W91-W92 CPV	Sample W93-W94 Lab Mean	Sample W93-W94 Diff from Grand Mean	Sample W93-W94 CPV	Instr Code
249AF6		1.987	0.133	0.79	2.265	0.216	0.72	ZZ
2AD5HE		1.762	-0.092	-0.54	1.838	-0.210	-0.70	ZZ
4G6219		1.742	-0.112	-0.66	1.923	-0.125	-0.42	ZZ
4SDT5N		2.095	0.242	1.42	2.482	0.433	1.44	ZZ
4Z9KFW		1.933	0.080	0.47	2.098	0.050	0.17	ZZ
6GPY6C		2.062	0.208	1.23	2.295	0.246	0.82	ZZ
AHBFK4	*	1.935	0.082	0.48	1.180	-0.869	-2.90	ZZ
EA2LPQ		1.983	0.130	0.77	2.300	0.251	0.84	ZZ
GPJXK3		1.993	0.140	0.82	2.332	0.283	0.94	ZZ
KSMX7T		1.592	-0.262	-1.54	1.743	-0.305	-1.02	ZZ
LCABDL		1.705	-0.148	-0.87	1.880	-0.169	-0.56	ZZ
MLLTQS		2.047	0.193	1.14	2.195	0.146	0.49	ZZ
PN9A89		1.757	-0.097	-0.57	2.082	0.033	0.11	ZZ
PPHH96		1.893	0.040	0.24	2.115	0.066	0.22	ZZ
Q5NJTQ		1.733	-0.120	-0.71	1.933	-0.115	-0.38	ZZ
TWHW6F		1.768	-0.085	-0.50	1.983	-0.065	-0.22	ZZ
ZGNA29		1.520	-0.333	-1.96	2.183	0.135	0.45	ZZ

Summary Statistics

	Sample W91-W92	Sample W93-W94
Grand Means	1.8533 minutes	2.0487 minutes
Stnd Dev Btwn Labs	0.1698 minutes	0.2999 minutes

Statistics based on 17 of 17 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

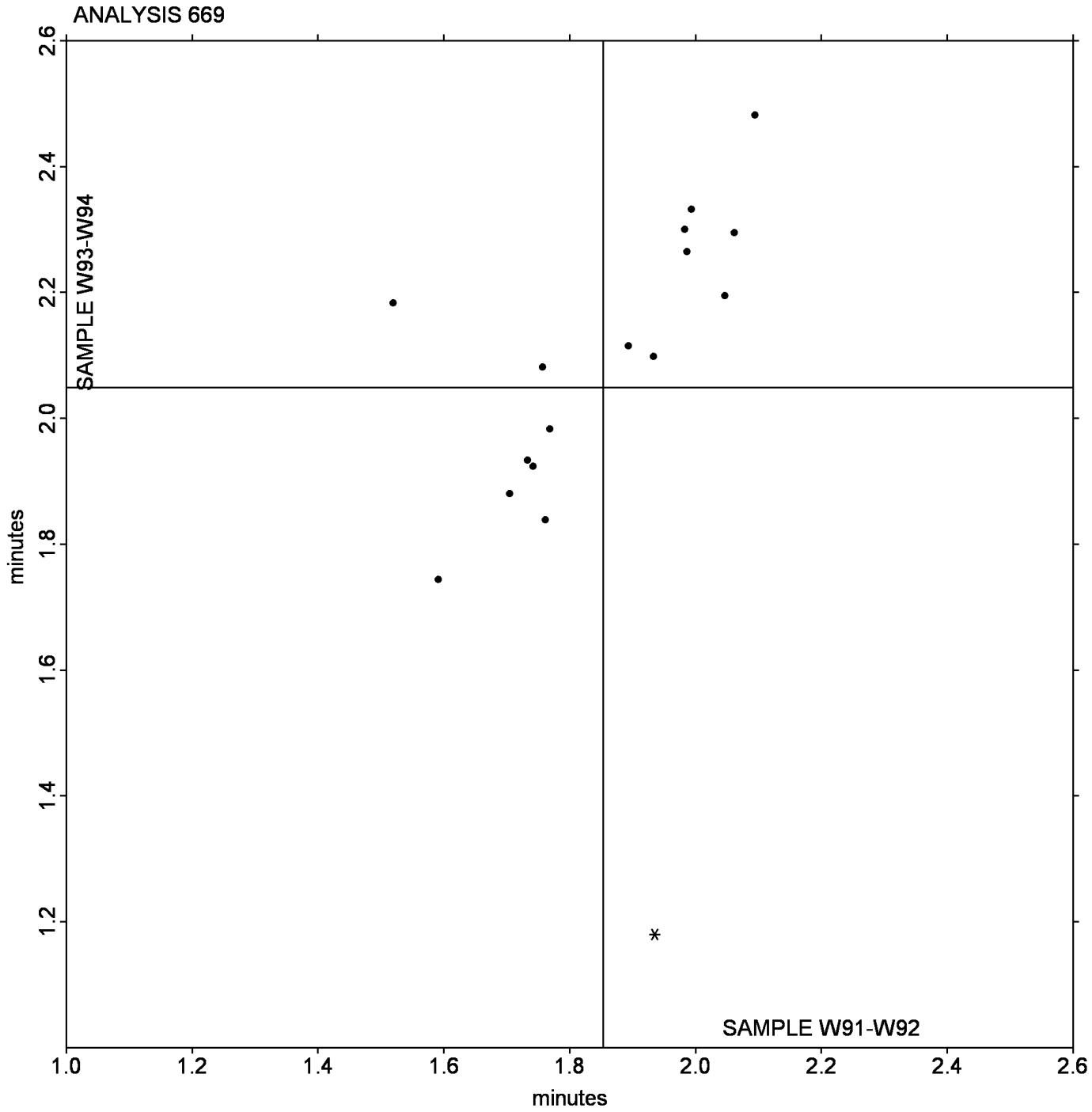
Rubber Interlaboratory Testing Program

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **W91-W92** = 1.8533 minutes

Grand Mean Sample **W93-W94** = 2.0487 minutes



Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Sample W91-W92 Diff from Grand Mean	Sample W91-W92 CPV	Sample W93-W94 Lab Mean	Sample W93-W94 Diff from Grand Mean	Sample W93-W94 CPV	Instr Code
3TQ2LB		1.280	-0.102	-0.74	1.433	-0.143	-0.75	ZZ
43LVU1		1.248	-0.134	-0.97	1.402	-0.174	-0.91	ZZ
46ZJ3B		1.308	-0.074	-0.53	1.437	-0.139	-0.73	ZZ
48P9LD		1.105	-0.277	-2.01	1.188	-0.388	-2.03	ZZ
4TUQWN		1.360	-0.022	-0.16	1.592	0.016	0.08	ZZ
78A6WL		1.495	0.113	0.82	1.645	0.069	0.36	ZZ
A2HYD6		1.688	0.306	2.22	1.827	0.251	1.31	ZZ
BMVN31		1.288	-0.094	-0.68	1.627	0.051	0.27	ZZ
HDDCVF		1.522	0.140	1.01	1.912	0.336	1.76	ZZ
J8PNXW		1.323	-0.059	-0.43	1.318	-0.258	-1.35	ZZ
KW835M		1.523	0.141	1.03	1.743	0.167	0.88	ZZ
M7TXUU		1.362	-0.020	-0.15	1.540	-0.036	-0.19	ZZ
TFUBMA		1.323	-0.059	-0.43	1.678	0.102	0.54	ZZ
UMNYH		1.525	0.143	1.04	1.828	0.252	1.32	ZZ
UMVST9		1.373	-0.009	-0.06	1.575	-0.001	-0.01	ZZ
VASLXD		1.313	-0.069	-0.50	1.485	-0.091	-0.48	ZZ
YC9TXC		1.455	0.073	0.53	1.563	-0.013	-0.07	ZZ

Summary Statistics

	Sample W91-W92	Sample W93-W94
Grand Means	1.3820 minutes	1.5761 minutes
Stnd Dev Btwn Labs	0.1378 minutes	0.1907 minutes

Statistics based on 17 of 17 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

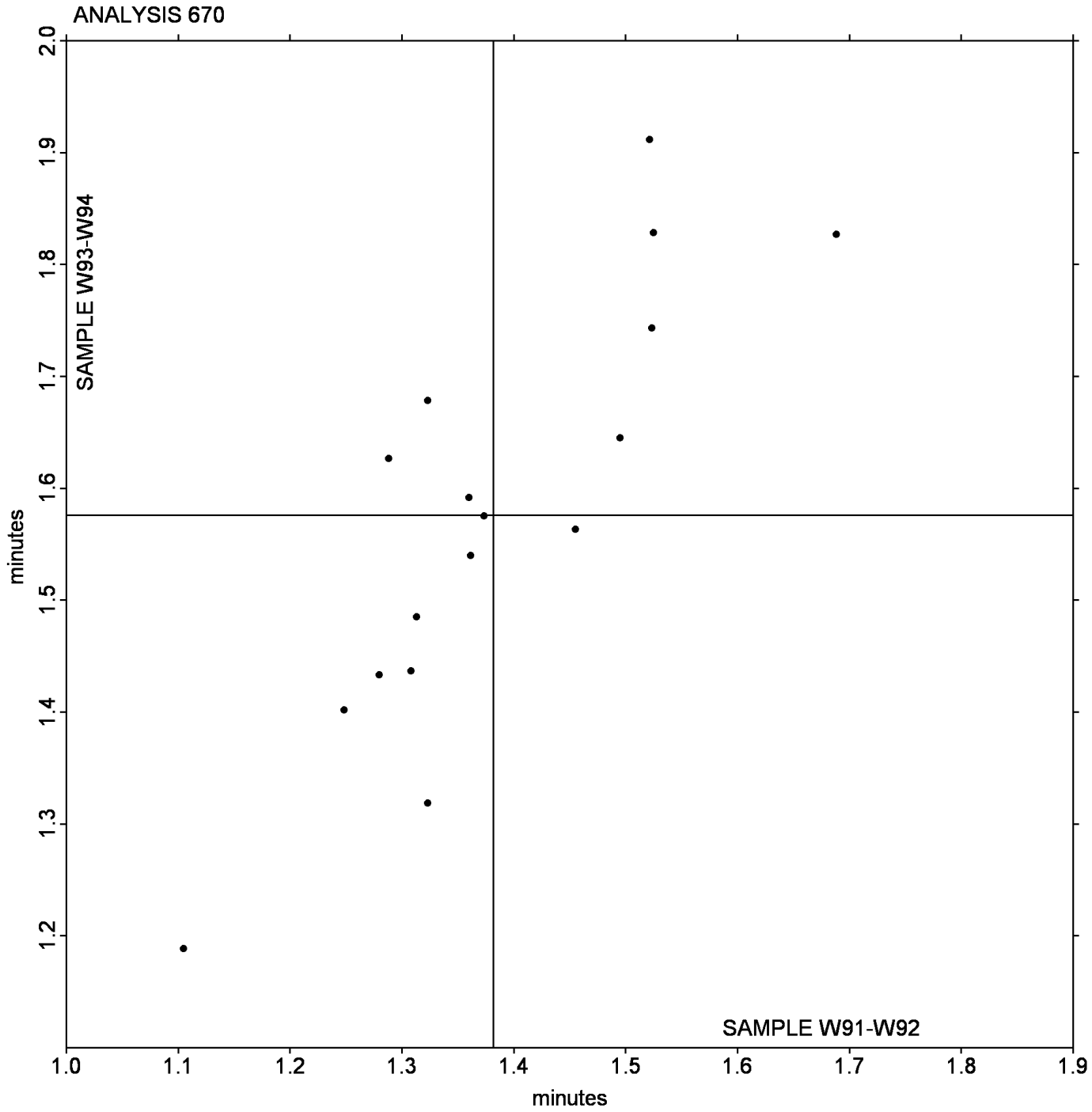
Rubber Interlaboratory Testing Program

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **W91-W92** = 1.3820 minutes

Grand Mean Sample **W93-W94** = 1.5761 minutes



Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Diff from Grand Mean	CPV	Sample W93-W94 Lab Mean	Diff from Grand Mean	CPV	Instr Code
1GEPS7		3.678	0.220	0.90	4.522	0.154	0.46	ZZ
2FSKLC		3.583	0.125	0.51	4.470	0.103	0.31	ZZ
2XRRPD		3.272	-0.186	-0.76	4.117	-0.251	-0.75	ZZ
3ZQ2S1		3.477	0.019	0.08	4.473	0.106	0.32	ZZ
5L7BCM		3.372	-0.086	-0.35	4.080	-0.287	-0.86	ZZ
6GNAJ7		3.305	-0.153	-0.62	4.068	-0.299	-0.89	ZZ
A4B2P7		3.180	-0.278	-1.13	4.072	-0.296	-0.88	ZZ
DEXUG		3.025	-0.433	-1.77	3.820	-0.547	-1.64	ZZ
ETGVL5		3.802	0.344	1.40	4.965	0.598	1.79	ZZ
JHL9FW		3.472	0.014	0.06	4.365	-0.002	-0.01	ZZ
LH2DMS		3.702	0.244	0.99	4.473	0.106	0.32	ZZ
LPQACN		3.230	-0.228	-0.93	4.265	-0.102	-0.31	ZZ
QQ3WV4		3.450	-0.008	-0.03	4.428	0.060	0.18	ZZ
SFBGG7		3.655	0.197	0.80	4.622	0.254	0.76	ZZ
U7RLC2		3.867	0.409	1.67	5.017	0.649	1.94	ZZ
W38F17		3.277	-0.181	-0.74	4.042	-0.326	-0.97	ZZ
W9STNC		3.170	-0.288	-1.18	4.048	-0.319	-0.95	ZZ
YD7HC2		3.730	0.272	1.11	4.765	0.398	1.19	ZZ

Summary Statistics

	Sample W91-W92	Sample W93-W94
Grand Means	3.4580 minutes	4.3673 minutes
Stnd Dev Btwn Labs	0.2450 minutes	0.3345 minutes

Statistics based on 18 of 18 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

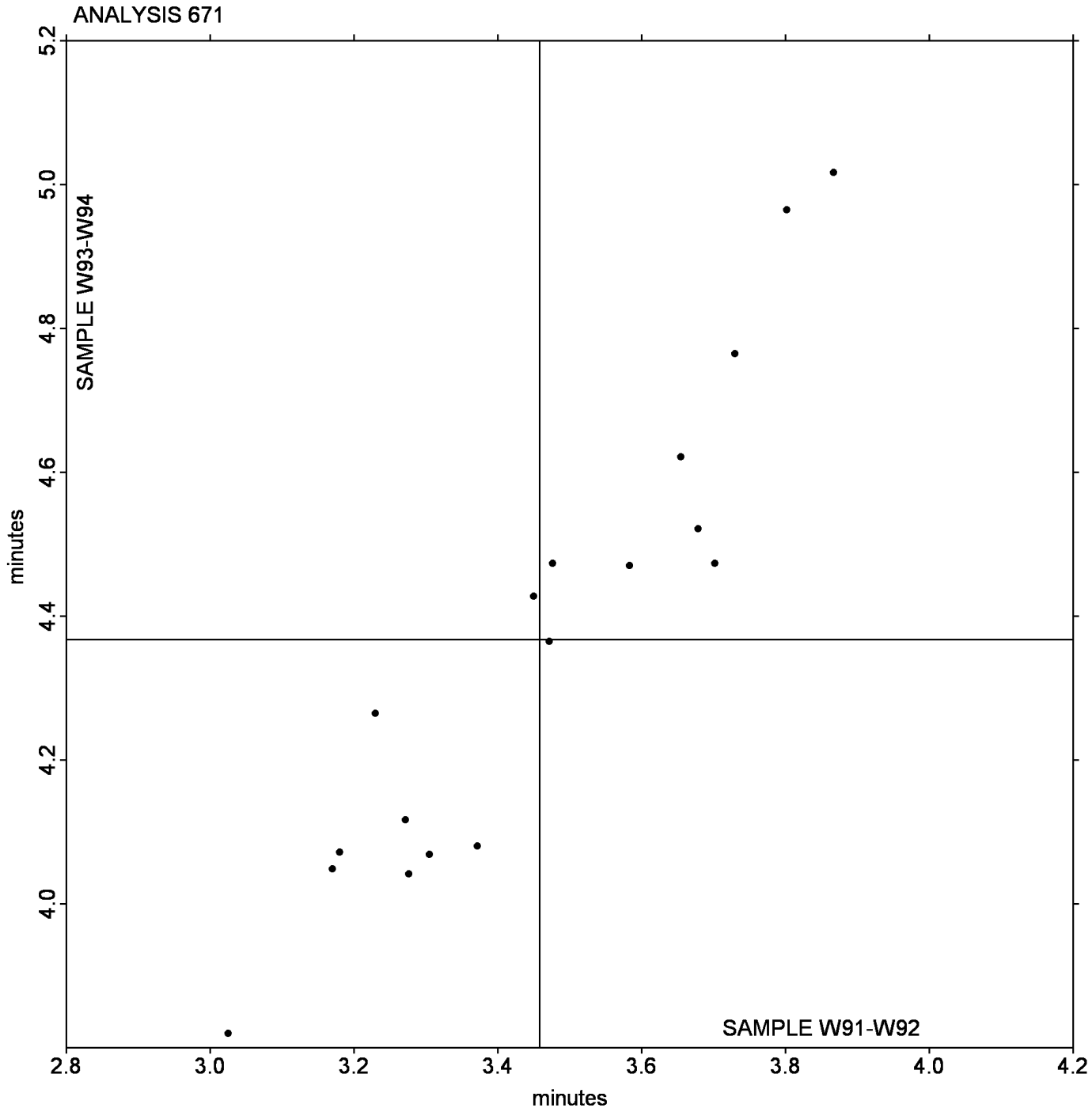
Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **W91-W92** = 3.4580 minutes

Grand Mean Sample **W93-W94** = 4.3673 minutes



Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Diff from Grand Mean	CPV	Sample W93-W94 Lab Mean	Diff from Grand Mean	CPV	Instr Code
1E61C7		13.27	-0.01	-0.01	8.373	-0.180	-0.15	ZZ
1U7QEZ		12.64	-0.64	-0.56	8.122	-0.431	-0.36	ZZ
23KVHX		13.99	0.70	0.62	8.538	-0.015	-0.01	ZZ
256XEA		13.54	0.26	0.23	8.195	-0.358	-0.30	ZZ
3582P5		10.60	-2.68	-2.35	7.337	-1.216	-1.03	ZZ
7ZG13K		11.84	-1.44	-1.26	7.642	-0.911	-0.77	ZZ
9X6QMP		13.42	0.13	0.12	7.688	-0.865	-0.73	ZZ
EYE1ZP		12.91	-0.37	-0.32	8.468	-0.085	-0.07	ZZ
LLGMGZ		13.30	0.02	0.02	9.690	1.137	0.96	ZZ
LMUSYE		12.42	-0.87	-0.76	7.565	-0.988	-0.84	ZZ
QL83X3		13.14	-0.14	-0.12	8.810	0.257	0.22	ZZ
RHMN8A		14.11	0.83	0.73	10.115	1.562	1.32	ZZ
RPSRCG		12.59	-0.69	-0.61	9.290	0.737	0.62	ZZ
SG3265	*	15.63	2.34	2.05	12.020	3.467	2.93	ZZ
UWU17B		13.67	0.39	0.34	7.278	-1.275	-1.08	ZZ
W39YP4		14.96	1.68	1.47	8.838	0.285	0.24	ZZ
WPXSAB		12.75	-0.54	-0.47	7.412	-1.141	-0.97	ZZ
XX8J2L		14.31	1.03	0.90	8.573	0.020	0.02	ZZ

Summary Statistics

	Sample W91-W92	Sample W93-W94
Grand Means	13.283 minutes	8.5531 minutes
Stnd Dev Btwn Labs	1.141 minutes	1.1822 minutes

Statistics based on 18 of 18 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

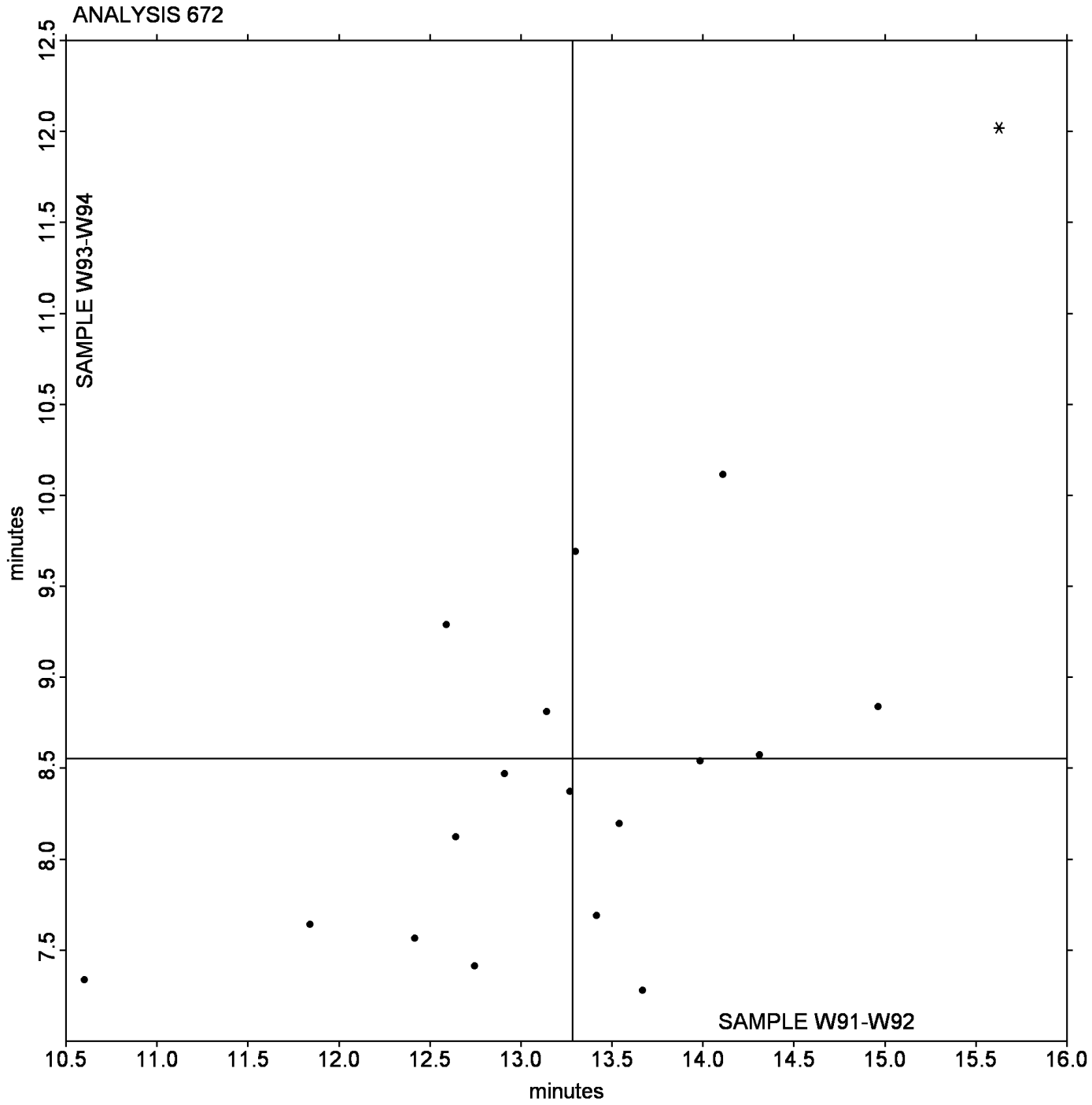
Rubber Interlaboratory Testing Program

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **W91-W92** = 13.283 minutes

Grand Mean Sample **W93-W94** = 8.5531 minutes



Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Diff from Grand Mean	CPV	Sample W93-W94 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3EKGWJ		6.997	0.800	1.22	11.50	1.38	1.02	ZZ
4N2LUY		6.460	0.263	0.40	9.55	-0.57	-0.42	ZZ
9CQ6VR		6.425	0.228	0.35	12.41	2.29	1.70	ZZ
A1FBCT		5.960	-0.237	-0.36	10.05	-0.07	-0.06	ZZ
AEN2QL		6.233	0.036	0.06	10.01	-0.11	-0.08	ZZ
C1TDMZ		6.115	-0.082	-0.13	9.88	-0.24	-0.18	ZZ
CCA2U5		6.472	0.275	0.42	8.67	-1.45	-1.08	ZZ
EEKYXJ		6.308	0.111	0.17	8.62	-1.50	-1.12	ZZ
HBGJHX		6.288	0.091	0.14	12.23	2.10	1.56	ZZ
J3RUMH		6.507	0.310	0.47	10.50	0.38	0.28	ZZ
LXHG4F		5.748	-0.449	-0.68	9.01	-1.12	-0.83	ZZ
PRR5VG		5.483	-0.714	-1.09	8.30	-1.82	-1.35	ZZ
RLJ3GT	X	14.372	8.175	12.44	25.87	15.75	11.71	ZZ
RQAF7A	*	8.045	1.848	2.81	11.79	1.66	1.24	ZZ
SG5VRD		5.723	-0.474	-0.72	9.54	-0.58	-0.43	ZZ
T34ELB		5.254	-0.943	-1.43	11.47	1.35	1.01	ZZ
V1Q2X7		5.877	-0.320	-0.49	10.15	0.02	0.02	ZZ
W5BFUC		5.455	-0.742	-1.13	8.39	-1.73	-1.29	ZZ

Summary Statistics

	Sample W91-W92	Sample W93-W94
Grand Means	6.1972 lbf.in	10.121 lbf.in
Stnd Dev Btwn Labs	0.6571 lbf.in	1.345 lbf.in

Statistics based on 17 of 18 reporting participants

Summary Statistics in SI Units

	Sample W91-W92	Sample W93-W94
Grand Means	7.0018 dN.m	11.435 dN.m
Stnd Dev Btwn Labs	0.7425 dN.m	1.520 dN.m

Statistics based on 17 of 18 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

Comments on assigned Data Flags for Test #673

RLJ3GT (X) - Data for all Samples are high.

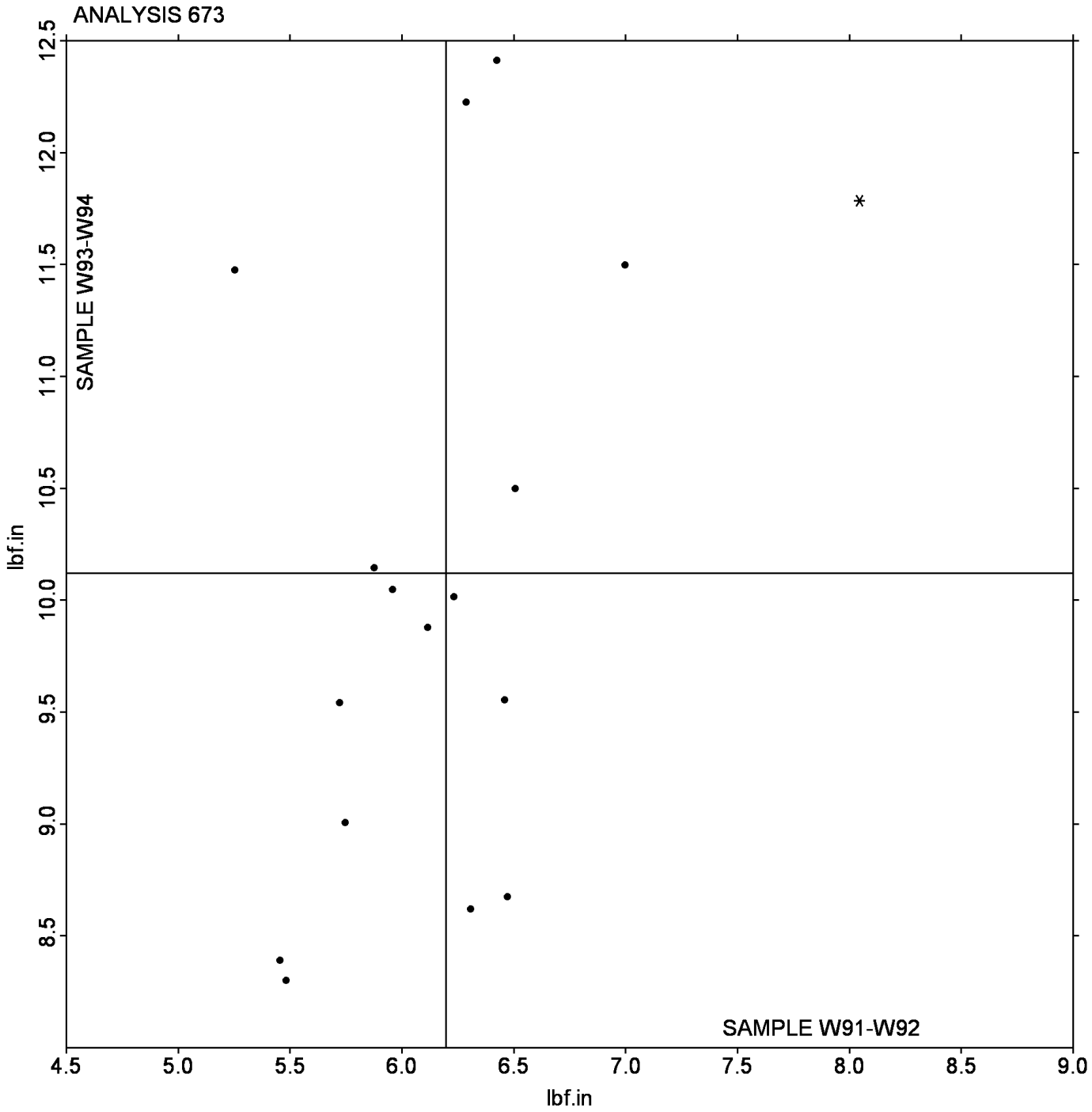
Rubber Interlaboratory Testing Program

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **W91-W92** = 6.1972 lbf.in

Grand Mean Sample **W93-W94** = 10.121 lbf.in



Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample W91-W92 Lab Mean	Sample W91-W92 Diff from Grand Mean	Sample W91-W92 CPV	Sample W93-W94 Lab Mean	Sample W93-W94 Diff from Grand Mean	Sample W93-W94 CPV	Instr Code
46KJFU		34.94	-2.31	-0.73	30.27	-1.76	-0.63	ZZ
5W2RZ5		37.13	-0.12	-0.04	31.01	-1.03	-0.37	ZZ
68LUHV		38.27	1.02	0.32	30.92	-1.12	-0.40	ZZ
9AAG2W		37.38	0.13	0.04	33.64	1.60	0.57	ZZ
AMMGN		35.81	-1.44	-0.46	29.97	-2.06	-0.74	ZZ
DQVXKF		37.78	0.53	0.17	32.18	0.15	0.05	ZZ
GZTWLD	*	47.08	9.83	3.12	40.61	8.58	3.07	ZZ
H47REG		35.25	-2.00	-0.63	30.52	-1.52	-0.54	ZZ
LBR1B1	X	74.30	37.05	11.77	69.06	37.02	13.24	ZZ
NQSB8X		35.46	-1.79	-0.57	33.20	1.16	0.42	ZZ
QCX4JE		39.01	1.76	0.56	33.97	1.94	0.69	ZZ
QVXJ8F		37.81	0.56	0.18	31.57	-0.46	-0.17	ZZ
RBMKEB		33.90	-3.35	-1.06	28.42	-3.61	-1.29	ZZ
RFHCG5		35.12	-2.13	-0.68	30.07	-1.97	-0.70	ZZ
RLL92E		38.67	1.42	0.45	32.87	0.84	0.30	ZZ
RZ6TEF		33.55	-3.70	-1.18	29.29	-2.75	-0.98	ZZ
SJ12SP		40.27	3.02	0.96	34.54	2.51	0.90	ZZ
Y7LZBD		35.82	-1.43	-0.46	31.52	-0.52	-0.18	ZZ

Summary Statistics

	W91-W92	W93-W94
Grand Means	37.249 lbf.in	32.032 lbf.in
Stnd Dev Btwn Labs	3.149 lbf.in	2.796 lbf.in

Statistics based on 17 of 18 reporting participants

Summary Statistics in SI Units

	W91-W92	W93-W94
Grand Means	42.086 dN.m	36.191 dN.m
Stnd Dev Btwn Labs	3.558 dN.m	3.159 dN.m

Statistics based on 17 of 18 reporting participants

Samples W91-W92: EPDM compound #1 & W93-W94: EPDM compound #2

Comments on assigned Data Flags for Test #674

LBR1B1 (X) - Data for all Samples are high.

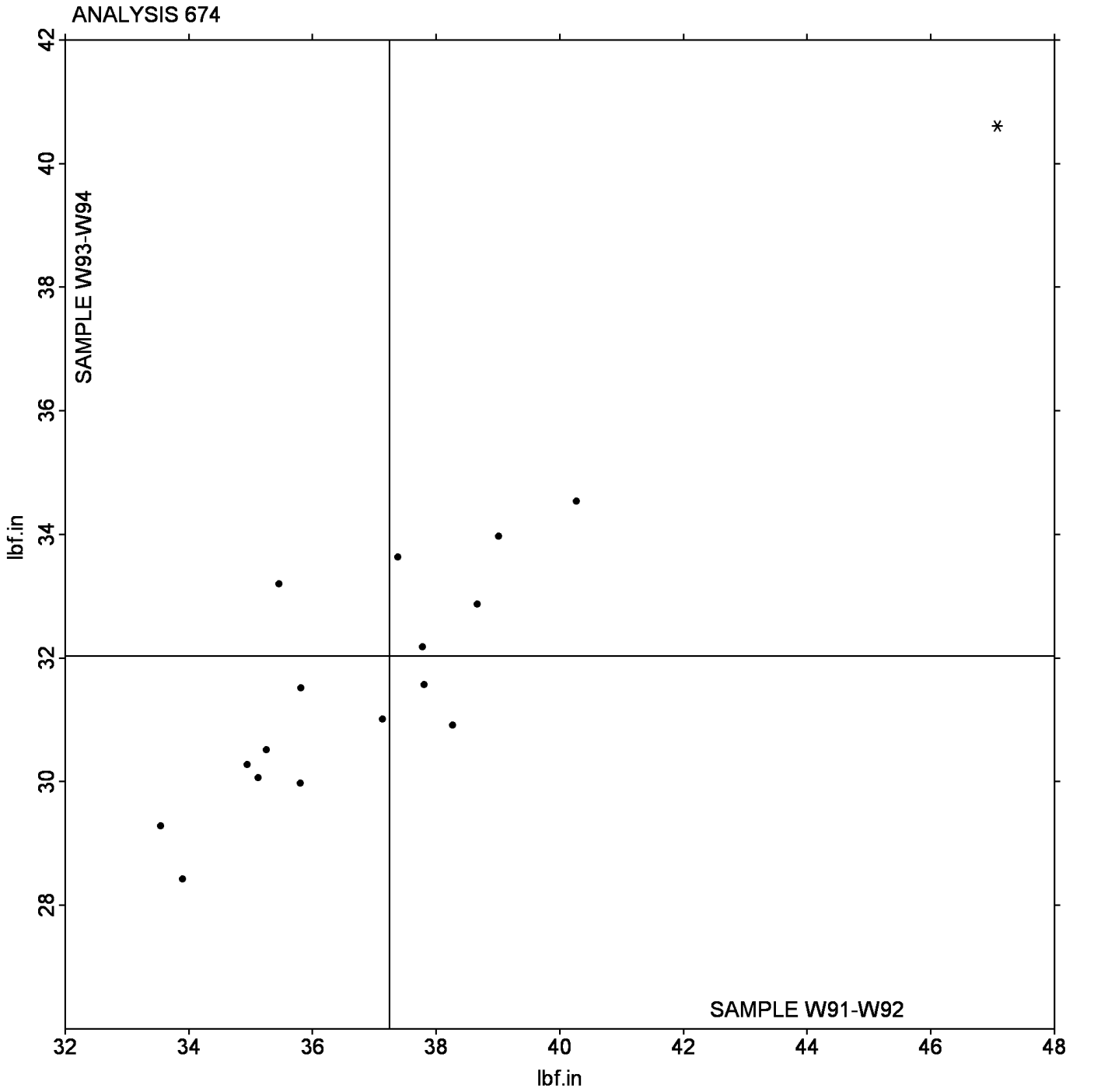
Rubber Interlaboratory Testing Program

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **W91-W92** = 37.249 lbf.in

Grand Mean Sample **W93-W94** = 32.032 lbf.in



Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample W95-W96 Lab Mean	Sample W95-W96 Diff from Grand Mean	Sample W95-W96 CPV	Sample W97-W98 Lab Mean	Sample W97-W98 Diff from Grand Mean	Sample W97-W98 CPV	Instr Code
1MGYLT		1.432	0.043	0.69	1.425	0.071	1.13	MC
23CQUS		1.310	-0.079	-1.26	1.273	-0.081	-1.30	MC
6TCE75		1.382	-0.007	-0.11	1.350	-0.004	-0.07	MC
7HJMZF		1.288	-0.100	-1.61	1.245	-0.109	-1.76	XX
9DQYA1		1.445	0.056	0.90	1.402	0.047	0.76	MD
9MQTQX		1.338	-0.050	-0.81	1.298	-0.056	-0.90	MD
ATNXU7		1.473	0.085	1.36	1.423	0.069	1.11	MD
BPM3M4		1.430	0.041	0.66	1.368	0.014	0.22	MC
CCFA2V		1.405	0.016	0.26	1.388	0.034	0.55	MC
FVGFR3		1.398	0.010	0.16	1.352	-0.003	-0.04	TP
HBSG9Q		1.405	0.016	0.26	1.360	0.006	0.09	MC
J7H63M		1.381	-0.008	-0.13	1.317	-0.038	-0.61	MC
JF4R15		1.302	-0.087	-1.39	1.265	-0.089	-1.44	MD
MLCPJ8		1.292	-0.097	-1.56	1.242	-0.113	-1.81	TP
MRC4W9		1.450	0.061	0.98	1.438	0.084	1.35	MC
PUQ429		1.358	-0.030	-0.49	1.347	-0.008	-0.12	XX
R37W9N		1.403	0.015	0.24	1.392	0.037	0.60	MC
REB91V	*	1.260	-0.129	-2.06	1.275	-0.079	-1.28	TP
SQ3BYG		1.422	0.033	0.53	1.393	0.039	0.63	MC
TPQKKD		1.432	0.043	0.69	1.387	0.032	0.52	MC
U6HW56		1.475	0.086	1.39	1.437	0.082	1.32	MC
UJVJMP		1.467	0.078	1.25	1.433	0.079	1.27	MC
X7SUJE		1.413	0.025	0.40	1.375	0.021	0.33	MC
XHY3LQ		1.367	-0.022	-0.35	1.320	-0.034	-0.55	MC

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	1.3886 minutes	1.3544 minutes
Stnd Dev Btwn Labs	0.0624 minutes	0.0623 minutes

Statistics based on 24 of 24 reporting participants

Samples W95-W96: EPDM compound, batch #1 & W97-W98: EPDM compound, batch #2

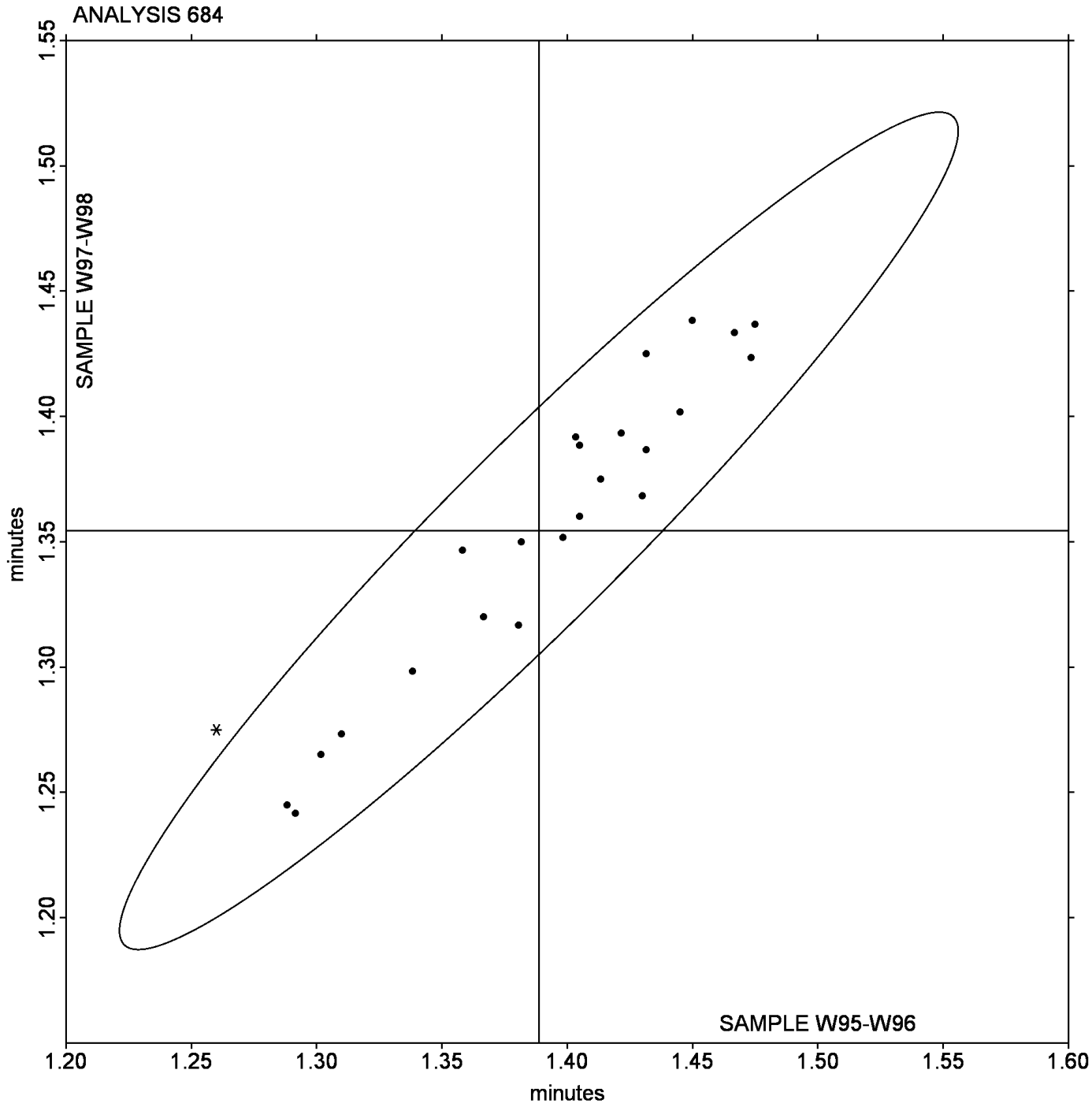
Rubber Interlaboratory Testing Program

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample **W95-W96** = 1.3886 minutes

Grand Mean Sample **W97-W98** = 1.3544 minutes



Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample W95-W96 Lab Mean	Sample W95-W96 Diff from Grand Mean	Sample W95-W96 CPV	Sample W97-W98 Lab Mean	Sample W97-W98 Diff from Grand Mean	Sample W97-W98 CPV	Instr Code
1JJD2D		1.330	0.009	0.12	1.335	0.006	0.08	MC
37KBW5		1.447	0.126	1.62	1.447	0.118	1.51	MD
3MT7V5		1.287	-0.034	-0.44	1.300	-0.029	-0.37	MD
3WK5PQ		1.287	-0.034	-0.44	1.307	-0.022	-0.29	MC
6PB9HF		1.272	-0.049	-0.64	1.265	-0.064	-0.82	XX
827CRZ		1.173	-0.148	-1.91	1.167	-0.162	-2.09	MC
8TKDCY		1.337	0.016	0.20	1.330	0.001	0.01	MD
9GM3TC		1.270	-0.051	-0.66	1.257	-0.072	-0.93	MC
9S4GKY		1.383	0.062	0.81	1.412	0.083	1.06	MC
AG7M6X		1.340	0.019	0.25	1.325	-0.004	-0.05	MC
AMFHWJ		1.253	-0.068	-0.87	1.245	-0.084	-1.08	MC
C41J8Y		1.188	-0.133	-1.71	1.218	-0.111	-1.42	MC
DJM6QJ		1.293	-0.028	-0.36	1.313	-0.016	-0.20	XX
FRYEF2		1.505	0.184	2.38	1.520	0.191	2.45	MD
G2R836		1.258	-0.063	-0.81	1.267	-0.062	-0.80	MC
GGULWP		1.269	-0.052	-0.67	1.256	-0.074	-0.94	MC
JEFT1D		1.365	0.044	0.57	1.360	0.031	0.40	MC
K1PJQC		1.420	0.099	1.28	1.430	0.101	1.30	MC
K1VNFX		1.380	0.059	0.76	1.378	0.049	0.63	TP
KMGUBJ		1.383	0.062	0.81	1.410	0.081	1.04	MC
LQ7H3W		1.328	0.007	0.09	1.343	0.014	0.18	MC
LXVG5R		1.310	-0.011	-0.14	1.360	0.031	0.40	MC
PA2K8N		1.460	0.139	1.80	1.442	0.113	1.45	MC
PMS9A3		1.340	0.019	0.25	1.332	0.003	0.03	MC
TUL9YR		1.322	0.001	0.01	1.333	0.004	0.05	MC
VEDQZP		1.268	-0.053	-0.68	1.288	-0.041	-0.52	XX
XNLF3Y		1.348	0.027	0.35	1.357	0.028	0.35	TP
Z7DEYU		1.268	-0.053	-0.68	1.318	-0.011	-0.14	MC
ZDG75J		1.223	-0.098	-1.26	1.230	-0.100	-1.28	MC

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	1.3210 minutes	1.3291 minutes
Stnd Dev Btwn Labs	0.0774 minutes	0.0778 minutes

Statistics based on 29 of 29 reporting participants

Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Samples W95-W96: EPDM compound, batch #1 & W97-W98: 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

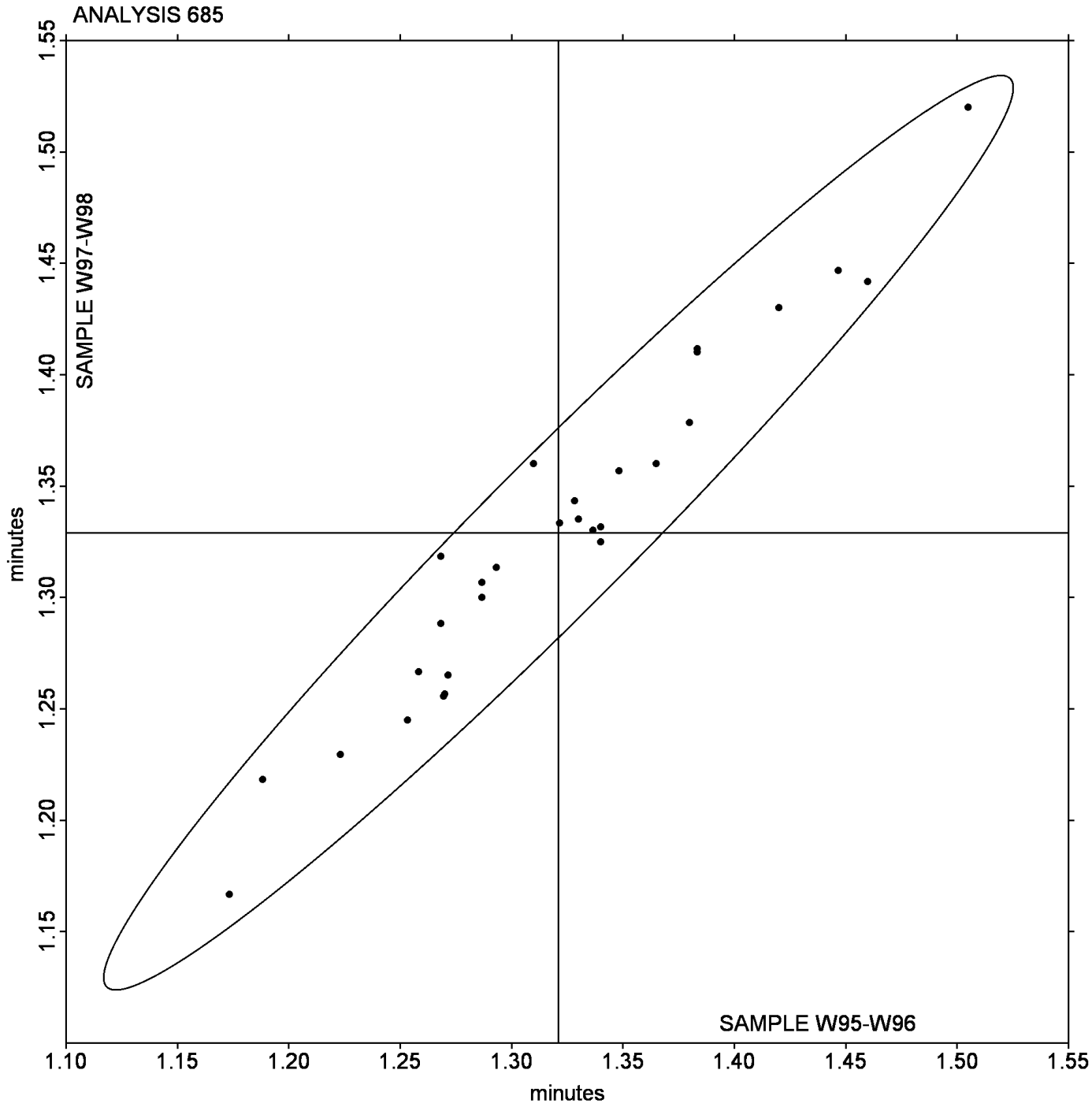
Rubber Interlaboratory Testing Program

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **W95-W96** = 1.3210 minutes

Grand Mean Sample **W97-W98** = 1.3291 minutes



Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

		Sample W95-W96			Sample W97-W98			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
1J7LBZ		4.112	-0.158	-0.67	3.975	-0.161	-0.60	XX
3EBY78		4.307	0.037	0.16	4.188	0.052	0.20	MD
3WWH1		4.058	-0.211	-0.90	3.895	-0.241	-0.90	MD
5C43ZQ		4.182	-0.088	-0.37	3.938	-0.198	-0.74	TP
5J1XPV		4.310	0.041	0.17	3.965	-0.171	-0.64	MC
7U7KUW		4.080	-0.189	-0.80	3.948	-0.188	-0.70	MC
8RPC1A		4.473	0.204	0.87	4.387	0.251	0.94	MC
8YCC34		3.952	-0.318	-1.35	3.847	-0.289	-1.09	MC
95ZC53		4.127	-0.143	-0.61	3.963	-0.173	-0.65	MD
ACD5WH		4.127	-0.143	-0.61	3.777	-0.359	-1.35	MC
AD25QZ		4.427	0.157	0.67	4.357	0.221	0.83	MC
BFU6W2		4.347	0.077	0.33	4.188	0.052	0.20	MC
DZY2M5		4.663	0.394	1.67	4.595	0.459	1.72	TP
E4P7RZ	*	3.635	-0.634	-2.70	3.527	-0.609	-2.29	TP
GCZSYN		4.342	0.072	0.31	4.097	-0.039	-0.15	MC
GRAYUE		4.482	0.212	0.90	4.315	0.179	0.67	MC
LTW99F		4.583	0.314	1.33	4.425	0.289	1.08	MC
MQ5WT		4.205	-0.064	-0.27	4.178	0.042	0.16	MC
NBEASU		4.196	-0.073	-0.31	4.219	0.083	0.31	MC
QQ42NE		4.597	0.327	1.39	4.545	0.409	1.53	MC
RK876K		3.935	-0.334	-1.42	3.740	-0.396	-1.49	MD
RTH8B1		4.358	0.089	0.38	4.448	0.312	1.17	MC
TNZB94		4.307	0.037	0.16	4.312	0.176	0.66	MC
U26EWB		4.575	0.306	1.30	4.380	0.244	0.92	MC
ULDRMJ		4.257	-0.013	-0.05	4.283	0.147	0.55	MC
WEJ86S		4.293	0.024	0.10	3.982	-0.154	-0.58	MC
XPPB9V		4.555	0.286	1.21	4.395	0.259	0.97	MC
XZZD73		4.057	-0.213	-0.90	3.940	-0.196	-0.74	XX

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	4.2693 minutes	4.1360 minutes
Stnd Dev Btwn Labs	0.2353 minutes	0.2665 minutes

Statistics based on 28 of 28 reporting participants

Samples W95-W96: EPDM compound, batch #1 & W97-W98: EPDM compound, batch #2

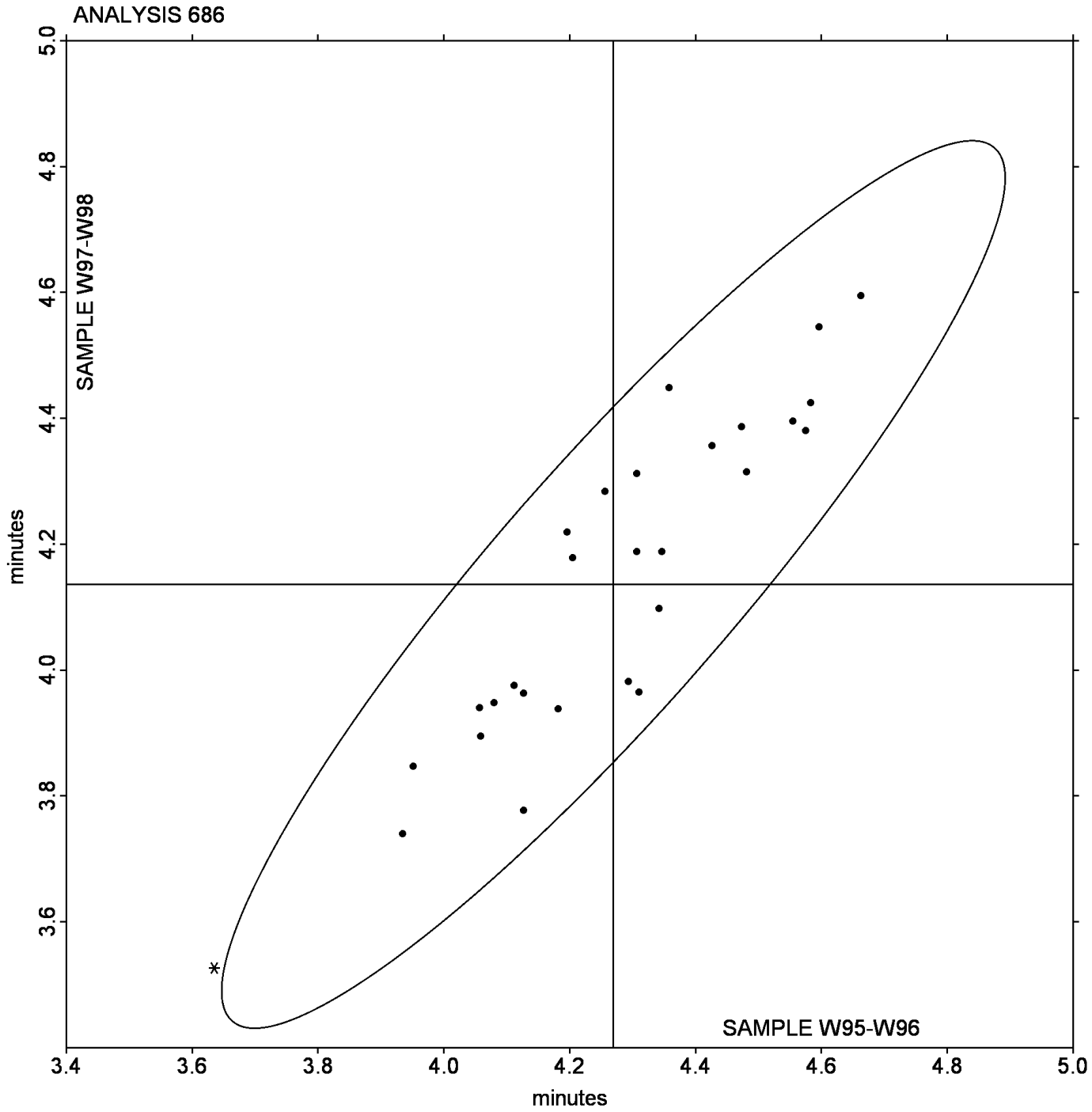
Rubber Interlaboratory Testing Program

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample **W95-W96** = 4.2693 minutes

Grand Mean Sample **W97-W98** = 4.1360 minutes



Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample W95-W96 Lab Mean	Sample W95-W96 Diff from Grand Mean	Sample W95-W96 CPV	Sample W97-W98 Lab Mean	Sample W97-W98 Diff from Grand Mean	Sample W97-W98 CPV	Instr Code
1AGTED		7.178	-0.391	-1.64	7.452	-0.475	-1.95	TP
1CG4X6		7.527	-0.043	-0.18	7.925	-0.001	-0.01	MC
1RDCE9		7.403	-0.166	-0.70	7.873	-0.053	-0.22	MD
5DQXDQ		7.593	0.024	0.10	8.062	0.135	0.56	MD
5S6KCW		7.645	0.075	0.32	7.892	-0.035	-0.14	XX
832U2N		7.378	-0.191	-0.80	7.673	-0.253	-1.04	MC
9DTJ46		7.723	0.154	0.64	8.173	0.247	1.02	MC
9H1MLN		7.525	-0.045	-0.19	8.126	0.200	0.82	MC
A8CGCW		7.505	-0.065	-0.27	7.910	-0.016	-0.07	MC
BFTLPG		7.713	0.144	0.60	8.243	0.317	1.30	MC
CBG6DN		7.478	-0.091	-0.38	7.852	-0.075	-0.31	XX
CYVT9F		7.168	-0.401	-1.68	7.757	-0.170	-0.70	TP
ENSW8F		7.560	-0.010	-0.04	7.992	0.065	0.27	MC
EVJ2P4		7.333	-0.236	-0.99	7.862	-0.065	-0.27	MC
FF2AJA		7.525	-0.045	-0.19	8.067	0.140	0.58	TP
FZ1NW9		7.258	-0.311	-1.31	7.367	-0.560	-2.30	MC
N1EQD8		7.962	0.392	1.64	8.105	0.179	0.74	MC
NBY168		7.973	0.404	1.69	8.382	0.455	1.87	MC
PDXDZL		7.665	0.095	0.40	8.048	0.122	0.50	MD
PKXC21		7.270	-0.300	-1.26	7.525	-0.401	-1.65	MC
QZAA9G		7.748	0.179	0.75	7.945	0.019	0.08	XX
S2RKXG		7.410	-0.160	-0.67	7.718	-0.208	-0.86	MD
T6C36E		7.561	-0.008	-0.04	7.825	-0.101	-0.42	MC
U38RW5		8.013	0.444	1.86	8.278	0.352	1.45	MC
VNH9D7		7.832	0.262	1.10	8.272	0.345	1.42	MC
WQ62Z2	*	8.057	0.487	2.04	8.052	0.125	0.52	MC
Y7ZWGA		7.532	-0.038	-0.16	7.898	-0.028	-0.11	MC
Z8FHTB		7.450	-0.120	-0.50	7.823	-0.103	-0.42	MC
ZW2YE2		7.532	-0.038	-0.16	7.765	-0.161	-0.66	MC

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	7.5696 minutes	7.9262 minutes
Stnd Dev Btwn Labs	0.2385 minutes	0.2431 minutes

Statistics based on 29 of 29 reporting participants

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Samples W95-W96: EPDM compound, batch #1 & W97-W98: EPDM compound, batch #2

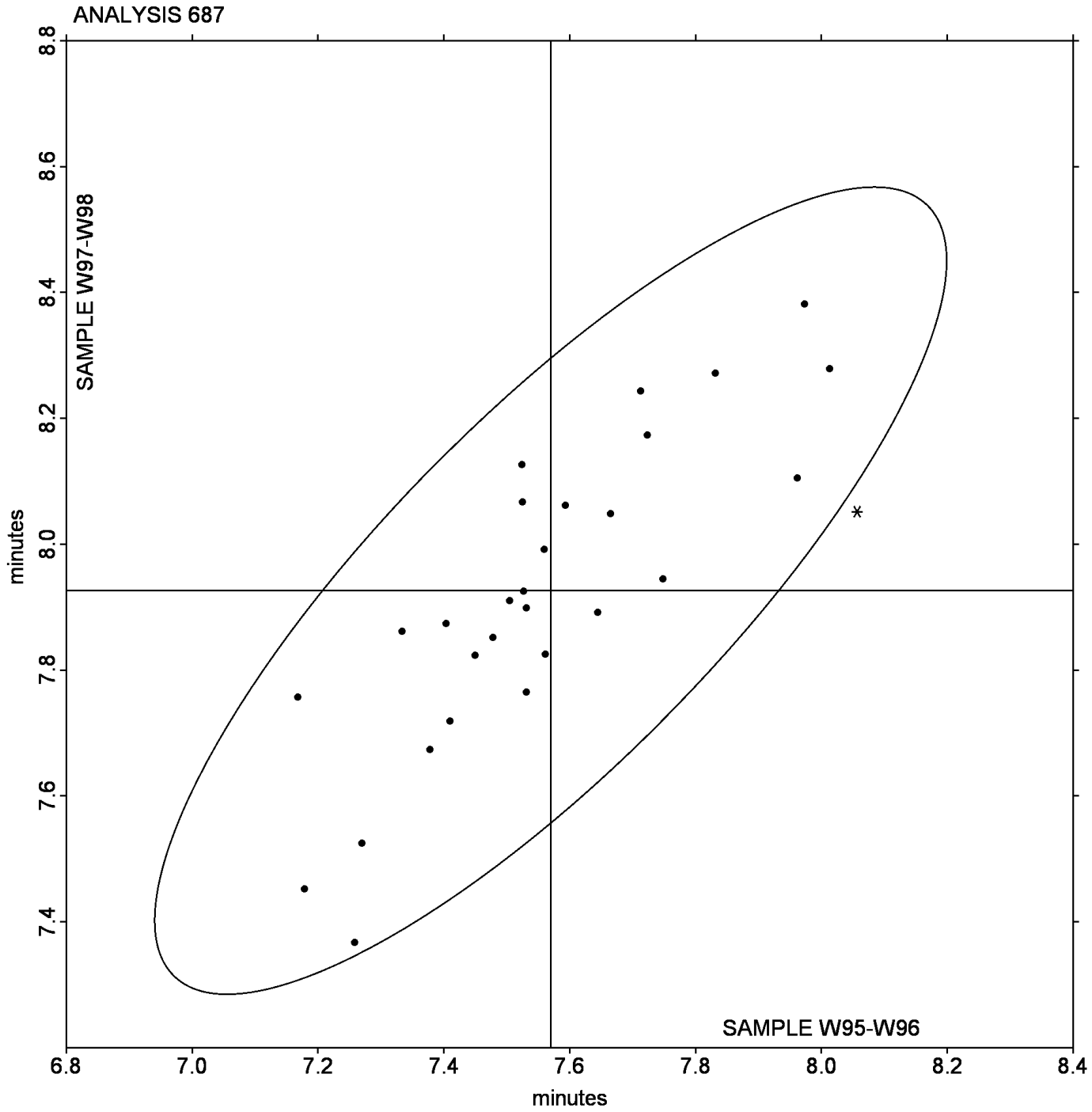
Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample **W95-W96** = 7.5696 minutes

Grand Mean Sample **W97-W98** = 7.9262 minutes



Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample W95-W96 Lab Mean	Sample W95-W96 Diff from Grand Mean	Sample W95-W96 CPV	Sample W97-W98 Lab Mean	Sample W97-W98 Diff from Grand Mean	Sample W97-W98 CPV	Instr Code
1Y91VD		2.607	-0.075	-0.17	2.732	-0.088	-0.20	MC
5QS86X		2.425	-0.257	-0.58	2.597	-0.223	-0.50	MC
6N68YZ	*	3.017	0.335	0.76	3.315	0.495	1.11	MC
6W3XVK		2.358	-0.324	-0.73	2.478	-0.341	-0.76	TP
95X6SE		2.287	-0.395	-0.89	2.467	-0.353	-0.79	MC
9BM15A		2.278	-0.404	-0.91	2.410	-0.410	-0.92	MC
9QDBUP		3.058	0.376	0.85	3.118	0.299	0.67	XX
A77EXY		2.325	-0.357	-0.81	2.468	-0.351	-0.79	MC
AL1N6X		2.750	0.068	0.15	2.822	0.002	0.00	MC
BH9HZR		2.984	0.302	0.68	3.197	0.377	0.85	MC
CS13AH	*	3.133	0.451	1.02	3.117	0.297	0.67	MC
CYQRZM		3.382	0.700	1.58	3.524	0.705	1.58	MD
DS2CQM		3.152	0.470	1.06	3.287	0.467	1.05	MC
F7TSAC		2.205	-0.477	-1.08	2.310	-0.510	-1.14	TP
JRD5KB		2.463	-0.219	-0.49	2.605	-0.215	-0.48	MC
M4DW47		2.509	-0.173	-0.39	2.648	-0.172	-0.38	MC
NCU6ES		3.615	0.933	2.11	3.773	0.954	2.14	TP
NTWE9F		2.415	-0.267	-0.60	2.542	-0.278	-0.62	MC
R2HVN8		2.498	-0.184	-0.42	2.727	-0.093	-0.21	XX
R8BDDC		2.307	-0.375	-0.85	2.412	-0.408	-0.91	MD
RKWZ75		2.205	-0.477	-1.08	2.354	-0.465	-1.04	MC
RU74LW		2.293	-0.389	-0.88	2.408	-0.411	-0.92	MC
TGKLBG		3.660	0.978	2.21	3.758	0.939	2.10	MD
U8ZXMF		2.388	-0.294	-0.66	2.468	-0.351	-0.79	MC
UBC6Q1		2.643	-0.039	-0.09	2.780	-0.040	-0.09	MC
VT6K7C		3.162	0.480	1.08	3.345	0.525	1.18	XX
W1H4S6		3.077	0.395	0.89	3.237	0.417	0.93	MD
X8WZQ3		2.118	-0.564	-1.27	2.250	-0.570	-1.28	MC
XHESJ5		2.462	-0.220	-0.50	2.620	-0.200	-0.45	MC

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	2.6820 lbf.in	2.8196 lbf.in
Stnd Dev Btwn Labs	0.4425 lbf.in	0.4461 lbf.in

Statistics based on 29 of 29 reporting participants

Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Summary Statistics in SI Units

Grand Means				
	3.0302	dN.m	3.1857	dN.m
Stnd Dev Btwn Labs				
	0.4999	dN.m	0.5041	dN.m

Statistics based on 29 of 29 reporting participants

Samples W95-W96: EPDM compound, batch #1 & W97-W98: EPDM compound, batch #2

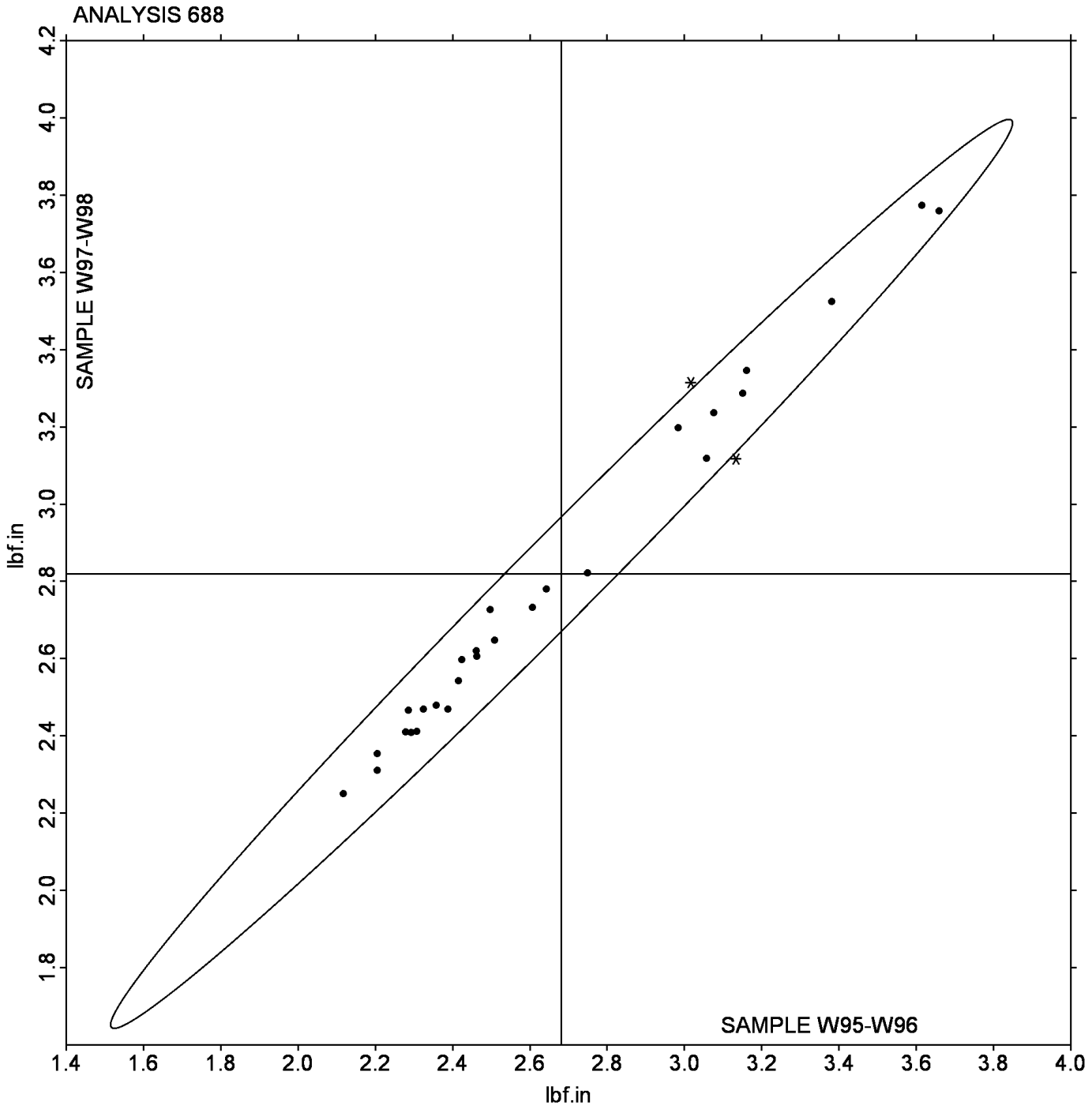
Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample **W95-W96** = 2.6820 lbf.in

Grand Mean Sample **W97-W98** = 2.8196 lbf.in



Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

		Sample W95-W96			Sample W97-W98			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
3HB3XV		13.14	-0.05	-0.09	12.58	-0.32	-0.55	MD
4H9MDH		13.28	0.09	0.18	12.86	-0.04	-0.07	MC
6BMCM		12.62	-0.57	-1.10	12.35	-0.55	-0.96	MC
6SXJVT		13.45	0.26	0.51	13.01	0.11	0.20	MC
719JUW		13.55	0.36	0.69	13.27	0.37	0.65	MD
AKPVBV		12.64	-0.55	-1.07	12.43	-0.47	-0.82	MD
AZLYYN		12.29	-0.90	-1.75	12.12	-0.78	-1.36	MC
B1CMNX		13.55	0.36	0.70	12.94	0.04	0.08	XX
C4M1KM		13.35	0.16	0.31	13.00	0.10	0.18	XX
D7N1H4		13.38	0.19	0.38	13.23	0.33	0.57	MC
DN5P9E		13.54	0.35	0.69	13.43	0.53	0.92	MC
ECJWFA		12.53	-0.66	-1.29	12.25	-0.65	-1.12	TP
F9M1QD		13.87	0.68	1.32	13.76	0.86	1.49	MC
FWQR7Q		13.57	0.38	0.74	13.52	0.62	1.08	MC
HC8S9H		13.29	0.10	0.19	13.11	0.21	0.36	XX
KMRCSA		12.90	-0.29	-0.56	12.48	-0.42	-0.73	MC
LEBU6F		14.14	0.95	1.84	13.97	1.07	1.87	MC
M6TKYR		12.64	-0.55	-1.07	12.88	-0.02	-0.03	MC
MZLLJ9	*	13.57	0.38	0.75	12.64	-0.26	-0.45	MC
N83BTM		13.13	-0.06	-0.12	13.15	0.25	0.44	MC
NRRTJU		13.39	0.20	0.39	12.79	-0.11	-0.18	MC
PJT3MV		13.26	0.07	0.13	12.94	0.04	0.08	MC
S3TP3D		13.49	0.30	0.58	13.25	0.35	0.61	MC
TELWPN		13.51	0.32	0.61	13.61	0.71	1.24	TP
TVUCS3	*	11.60	-1.59	-3.08	11.02	-1.88	-3.28	TP
V27L1C		13.49	0.30	0.57	13.04	0.14	0.25	MC
VBYLQ8		12.91	-0.28	-0.54	12.46	-0.44	-0.76	MD
WXXK14		13.05	-0.14	-0.28	13.00	0.10	0.17	MC
YF9GJ7		13.37	0.18	0.35	12.98	0.08	0.14	MC

Summary Statistics

	Sample W95-W96	Sample W97-W98
Grand Means	13.189 lbf.in	12.899 lbf.in
Stnd Dev Btwn Labs	0.516 lbf.in	0.575 lbf.in

Statistics based on 29 of 29 reporting participants

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Summary Statistics in SI Units

Grand Means				
	14.901	dN.m	14.574	dN.m
Stnd Dev Btwn Labs				
	0.583	dN.m	0.650	dN.m

Statistics based on 29 of 29 reporting participants

Samples W95-W96: EPDM compound, batch #1 & W97-W98: EPDM compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample **W95-W96** = 13.189 lbf.in

Grand Mean Sample **W97-W98** = 12.899 lbf.in