

Rubber Interlaboratory Testing Program

Summary Report #186- 4th Qtr 2015

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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
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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.: 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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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:

<u>DATA FLAG</u>	<u>STATISTICALLY INCLUDED/EXCLUDED</u>	<u>ACTION REQUIRED</u>
*	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 D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		3,504.5	249.4	1.90	3,478.0	198.9	1.63	ZZ
2U3CQF		3,366.5	111.4	0.85	3,381.5	102.4	0.84	ZZ
2X3LYW	X	3,389.6	134.5	1.03	3,697.0	418.0	3.43	ZZ
32GFET	X	5,551.0	2,295.9	17.52	5,437.5	2,158.4	17.69	ZZ
36X6CB		3,461.0	205.9	1.57	3,461.0	181.9	1.49	ZZ
3AQ8HW		3,272.1	17.0	0.13	3,205.4	-73.7	-0.60	ZZ
3BLR8G		3,181.5	-73.6	-0.56	3,285.0	5.9	0.05	ZZ
3GCX4R		3,191.5	-63.6	-0.49	3,264.0	-15.1	-0.12	ZZ
47J7U6		3,424.0	168.9	1.29	3,328.0	48.9	0.40	ZZ
48EPW7		3,292.4	37.3	0.28	3,408.4	129.4	1.06	ZZ
4LKKF8		3,232.0	-23.1	-0.18	3,242.0	-37.1	-0.30	ZZ
4PJY3X		3,213.7	-41.4	-0.32	3,277.0	-2.0	-0.02	ZZ
4TKZ3U	*	2,925.5	-329.6	-2.51	3,044.0	-235.1	-1.93	ZZ
4TYQR6		3,428.5	173.4	1.32	3,410.5	131.4	1.08	ZZ
4WHLRC		3,255.4	0.3	0.00	3,189.4	-89.7	-0.73	ZZ
68BJWM		3,257.0	1.9	0.01	3,191.5	-87.6	-0.72	ZZ
696A32		3,204.5	-50.6	-0.39	3,308.3	29.2	0.24	ZZ
6U9XUX		3,417.0	161.9	1.24	3,524.5	245.4	2.01	ZZ
6V2NZC		2,934.9	-320.2	-2.44	3,040.7	-238.3	-1.95	ZZ
7RXF98		3,306.0	50.9	0.39	3,348.0	68.9	0.56	ZZ
8BAKAP		3,173.5	-81.6	-0.62	3,186.5	-92.6	-0.76	ZZ
8YTXY4		3,220.0	-35.1	-0.27	3,229.5	-49.6	-0.41	ZZ
8ZAUQ3		3,245.5	-9.6	-0.07	3,362.0	82.9	0.68	ZZ
9G64M6		3,493.5	238.4	1.82	3,575.0	295.9	2.43	ZZ
9UDMKY		3,277.9	22.8	0.17	3,212.6	-66.4	-0.54	ZZ
A294BV		3,244.5	-10.6	-0.08	3,201.0	-78.0	-0.64	ZZ
A8JZF6		3,170.3	-84.8	-0.65	3,161.4	-117.7	-0.96	ZZ
A8WQ72		3,224.5	-30.6	-0.23	3,220.5	-58.6	-0.48	ZZ
APJ8BH		3,224.5	-30.6	-0.23	3,233.0	-46.1	-0.38	ZZ
AZ2N4P		3,237.5	-17.6	-0.13	3,303.5	24.4	0.20	ZZ
B4HD3T		3,422.2	167.1	1.27	3,305.4	26.4	0.22	ZZ
BPYN4Q		3,163.3	-91.8	-0.70	3,116.9	-162.2	-1.33	ZZ
CE8RHF		3,374.0	118.9	0.91	3,316.7	37.6	0.31	ZZ
CPUTXP	X	2,973.0	-282.1	-2.15	2,880.0	-399.1	-3.27	ZZ
CVGFTV		3,064.5	-190.6	-1.45	3,223.0	-56.1	-0.46	ZZ
DEQVPF		3,351.1	96.0	0.73	3,292.4	13.3	0.11	ZZ
DFY86W		3,210.0	-45.1	-0.34	3,217.5	-61.6	-0.50	ZZ
DGVMHT		3,237.6	-17.5	-0.13	3,366.1	87.0	0.71	ZZ
DH9XVZ		3,306.9	51.8	0.40	3,176.4	-102.7	-0.84	ZZ

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Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DKEHKL		3,090.1	-165.0	-1.26	3,176.3	-102.8	-0.84	ZZ
DVCJXP		2,980.0	-275.1	-2.10	2,995.0	-284.1	-2.33	ZZ
DW7A44		3,415.5	160.4	1.22	3,285.0	5.9	0.05	ZZ
DZ7FMG		3,528.5	273.4	2.09	3,541.5	262.4	2.15	ZZ
E4YWCF		3,053.1	-202.0	-1.54	3,060.3	-218.7	-1.79	ZZ
E6VEDG		3,354.1	99.0	0.76	3,329.3	50.2	0.41	ZZ
E7TMHU		3,304.8	49.7	0.38	3,341.9	62.8	0.51	ZZ
EACGJ2		3,269.5	14.4	0.11	3,249.5	-29.6	-0.24	ZZ
EGCYXD		3,040.5	-214.6	-1.64	3,020.5	-258.6	-2.12	ZZ
EMF3LQ		3,436.7	181.6	1.39	3,492.2	213.1	1.75	ZZ
ENV8H4		3,445.3	190.2	1.45	3,348.0	68.9	0.56	ZZ
ERAZBH		3,297.5	42.4	0.32	3,389.0	109.9	0.90	ZZ
EV7NRP		3,477.3	222.2	1.70	3,535.3	256.3	2.10	ZZ
F2Q7MC		3,152.0	-103.1	-0.79	3,251.5	-27.6	-0.23	ZZ
F8Y87U	*	3,307.1	52.0	0.40	3,509.4	230.3	1.89	ZZ
FD6ZZQ		3,292.0	36.9	0.28	3,306.5	27.4	0.22	ZZ
FJA6N4		3,172.7	-82.3	-0.63	3,201.0	-78.0	-0.64	ZZ
FY7WVY		3,384.0	128.9	0.98	3,258.0	-21.1	-0.17	ZZ
GHFEHN		3,293.0	37.9	0.29	3,263.5	-15.6	-0.13	ZZ
GMA9FP		3,264.0	8.9	0.07	3,316.0	36.9	0.30	ZZ
GPGQDL		3,301.0	45.9	0.35	3,401.7	122.6	1.01	ZZ
GQBGJZ		3,168.5	-86.6	-0.66	3,255.5	-23.6	-0.19	ZZ
HDJA2P		3,282.6	27.5	0.21	3,249.2	-29.9	-0.25	ZZ
HM9XYD		3,306.9	51.8	0.40	3,328.6	49.6	0.41	ZZ
JRXUZA		3,173.5	-81.6	-0.62	3,125.0	-154.1	-1.26	ZZ
K43AKJ		3,359.3	104.2	0.79	3,345.1	66.0	0.54	ZZ
K7BPRP		3,035.5	-219.6	-1.68	3,093.0	-186.1	-1.52	ZZ
KJJ8PK		3,303.5	48.4	0.37	3,463.5	184.4	1.51	ZZ
KJV4UP		3,379.4	124.3	0.95	3,408.4	129.4	1.06	ZZ
L4XEEH		3,096.6	-158.5	-1.21	3,125.6	-153.5	-1.26	ZZ
LJCHXR		3,201.0	-54.1	-0.41	3,197.4	-81.7	-0.67	ZZ
LV8U9K	*	2,944.0	-311.1	-2.37	3,125.5	-153.6	-1.26	ZZ
M6QMY8		3,148.1	-107.0	-0.82	3,239.4	-39.6	-0.32	ZZ
MAG3LT		3,217.0	-38.1	-0.29	3,269.0	-10.1	-0.08	ZZ
MJ7MRR		3,053.1	-202.0	-1.54	3,154.6	-124.5	-1.02	ZZ
MR2N96		3,150.0	-105.1	-0.80	3,075.0	-204.1	-1.67	ZZ
MTVEEJ	X	3,133.5	-121.6	-0.93	3,424.3	145.3	1.19	ZZ
N7G6ED		3,328.6	73.6	0.56	3,362.0	82.9	0.68	ZZ
NAGGAD	X	2,775.0	-480.1	-3.66	3,050.0	-229.1	-1.88	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
NBB8FT		3,119.0	-136.1	-1.04	3,109.0	-170.1	-1.39	ZZ
NWCXYD		3,413.5	158.4	1.21	3,465.0	185.9	1.52	ZZ
P9YMA4		3,164.0	-91.1	-0.69	3,164.0	-115.0	-0.94	ZZ
PGTWFT		3,245.5	-9.6	-0.07	3,266.0	-13.1	-0.11	ZZ
PT63QV		3,471.2	216.1	1.65	3,363.5	84.4	0.69	ZZ
QJD74K		3,196.5	-58.6	-0.45	3,264.5	-14.6	-0.12	ZZ
QWKUGN		3,037.1	-218.0	-1.66	3,166.9	-112.1	-0.92	ZZ
QZJ93R		3,145.0	-110.1	-0.84	3,225.0	-54.1	-0.44	ZZ
R7J8QM		3,222.0	-33.0	-0.25	3,198.1	-80.9	-0.66	ZZ
T8XVRE		3,299.5	44.4	0.34	3,338.5	59.4	0.49	ZZ
TC899D		3,172.5	-82.6	-0.63	3,204.5	-74.6	-0.61	ZZ
TVH2DZ		3,363.5	108.4	0.83	3,341.7	62.6	0.51	ZZ
TY22TF		3,215.5	-39.6	-0.30	3,285.0	5.9	0.05	ZZ
UAFDM4	X	3,002.3	-252.8	-1.93	3,422.9	143.9	1.18	ZZ
UEA8J6		3,303.0	47.9	0.37	3,314.0	34.9	0.29	ZZ
UGGPH2		3,312.0	56.9	0.43	3,238.0	-41.1	-0.34	ZZ
UH9QJH		3,152.4	-102.7	-0.78	3,212.3	-66.8	-0.55	ZZ
UWT9CM		3,094.0	-161.1	-1.23	3,125.0	-154.1	-1.26	ZZ
V9FUVM		3,126.5	-128.6	-0.98	3,279.0	-0.1	0.00	ZZ
VGX7B9		3,176.0	-79.1	-0.60	3,278.4	-0.7	-0.01	ZZ
VH7F2K		3,425.5	170.4	1.30	3,423.0	143.9	1.18	ZZ
VUZQDX		3,376.0	120.9	0.92	3,338.5	59.4	0.49	ZZ
W878X9		3,193.4	-61.7	-0.47	3,231.9	-47.2	-0.39	ZZ
W9ZX4M		3,316.1	61.0	0.47	3,306.6	27.5	0.23	ZZ
WFYEHY		3,272.0	16.9	0.13	3,225.5	-53.6	-0.44	ZZ
WKQPRX		3,432.9	177.8	1.36	3,435.0	155.9	1.28	ZZ
X74Y7Z	*	3,112.5	-142.5	-1.09	3,327.2	48.1	0.39	ZZ
XBWXHB		3,248.1	-6.9	-0.05	3,184.3	-94.7	-0.78	ZZ
XK6B2Y		3,309.0	53.9	0.41	3,238.5	-40.6	-0.33	ZZ
XNLZYG		3,505.6	250.5	1.91	3,563.6	284.5	2.33	ZZ
XTZD7W		3,391.5	136.4	1.04	3,454.0	174.9	1.43	ZZ
XXAQLA		3,108.2	-146.9	-1.12	3,117.6	-161.4	-1.32	ZZ
YK36XA	X	3,765.0	509.9	3.89	3,850.0	570.9	4.68	ZZ
YM8TDZ		3,045.8	-209.3	-1.60	3,169.1	-110.0	-0.90	ZZ
YN3D3K		3,320.7	65.6	0.50	3,401.7	122.6	1.01	ZZ
YUQWK3		3,363.9	108.8	0.83	3,416.4	137.3	1.13	ZZ
YVY934		3,333.0	77.9	0.59	3,253.5	-25.6	-0.21	ZZ
Z7X2BV		3,280.5	25.4	0.19	3,301.0	21.9	0.18	ZZ
ZDC8K8		3,301.0	45.9	0.35	3,304.5	25.4	0.21	ZZ

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ZYJHQV		3,234.0	-21.1	-0.16	3,270.5	-8.6	-0.07	ZZ

Summary Statistics			
Grand Means	3,255.08 psi		3,279.06 psi
Std Dev Btwn Labs	131.08 psi		122.03 psi
Statistics based on 111 of 118 reporting participants			

Summary Statistics in SI Units			
Grand Means	22.443 MPa		22.61 MPa
Std Dev Btwn Labs	0.904 MPa		0.84 MPa
Statistics based on 111 of 118 reporting participants			

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #605

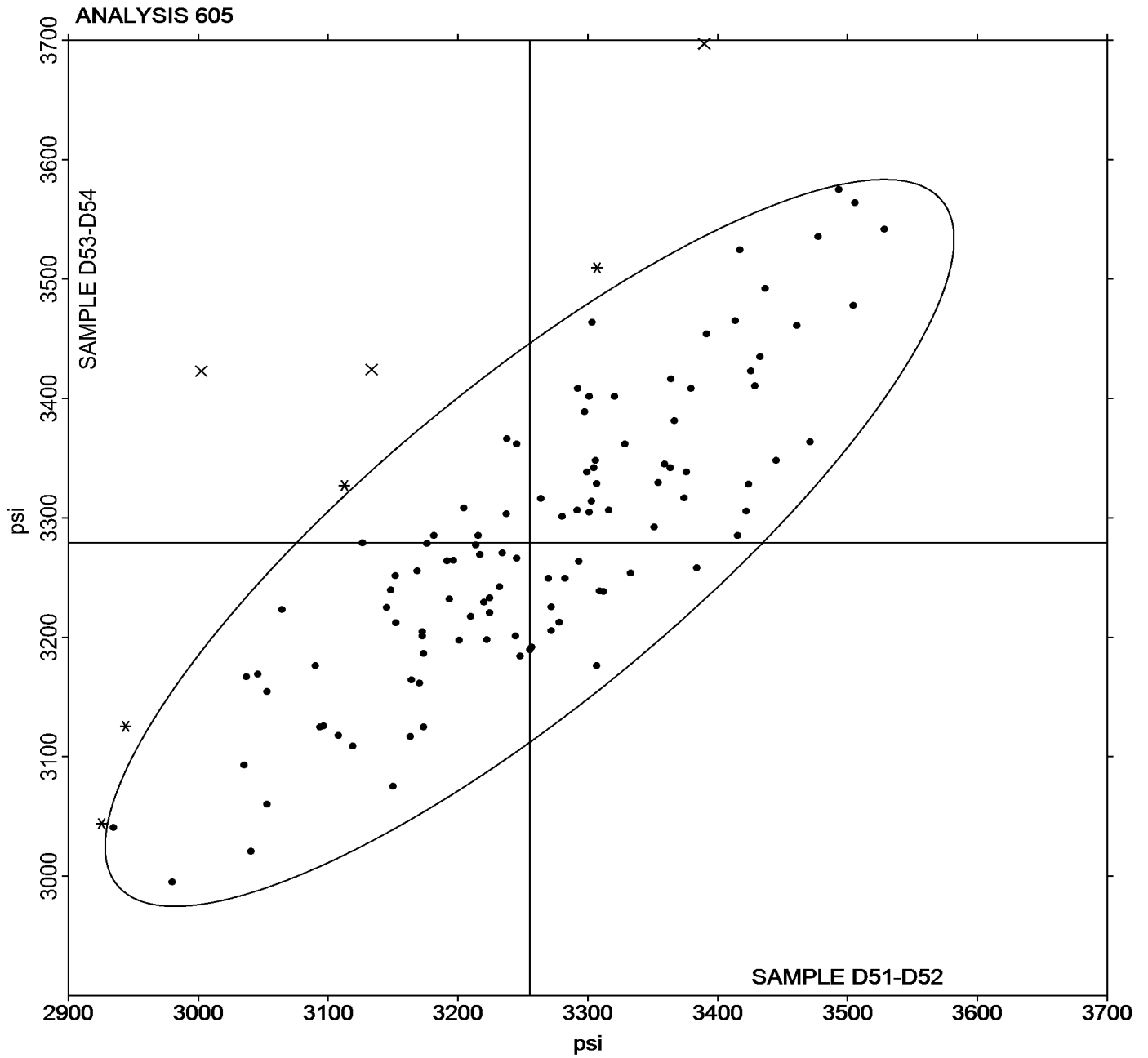
- 2X3LYW (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are high.
- 32GFET (X) - Extreme data.
- CPUTXP (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are low.
- MTVEEJ (X) - Inconsistency in testing between Sample groups.
- NAGGAD (X) - Inconsistency in testing between Sample groups. Data for Sample group D51-D52 are low.
- UAFDM4 (X) - Inconsistency in testing between Sample groups. Inconsistent in testing within Sample group D51-D52.
- YK36XA (X) - Data for all Samples are high. Possible systematic error.

Analysis 605

Tensile Strength (psi)

Grand Mean Sample D51 = 3,255.08 psi

Grand Mean Sample D52 = 3,279.06 psi



Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		635.0	24.7	0.84	628.5	22.7	0.74	ZZ
2U3CQF		647.0	36.7	1.24	642.0	36.2	1.18	ZZ
2X3LYW		642.0	31.7	1.07	632.5	26.7	0.87	ZZ
32GFET		600.0	-10.3	-0.35	570.0	-35.8	-1.17	ZZ
36X6CB		572.0	-38.3	-1.30	580.5	-25.3	-0.83	ZZ
3AQ8HW		578.5	-31.8	-1.08	567.5	-38.3	-1.25	ZZ
3BLR8G		598.5	-11.8	-0.40	596.0	-9.8	-0.32	ZZ
3GCX4R		580.5	-29.8	-1.01	580.5	-25.3	-0.83	ZZ
47J7U6		645.0	34.7	1.17	640.0	34.2	1.12	ZZ
48EPW7		596.5	-13.8	-0.47	605.0	-0.8	-0.03	ZZ
4LKKF8		602.5	-7.8	-0.26	593.0	-12.8	-0.42	ZZ
4PJY3X		606.9	-3.4	-0.11	591.4	-14.5	-0.47	ZZ
4TKZ3U		569.7	-40.6	-1.37	580.1	-25.7	-0.84	ZZ
4TYQR6		629.0	18.7	0.63	628.5	22.7	0.74	ZZ
4WHLRC		607.0	-3.3	-0.11	595.5	-10.3	-0.34	ZZ
68BJWM	X	761.0	150.7	5.10	676.0	70.2	2.30	ZZ
696A32	X	513.5	-96.8	-3.27	570.0	-35.8	-1.17	ZZ
6V2NZC		575.5	-34.8	-1.18	577.0	-28.8	-0.94	ZZ
7RXF98		594.5	-15.8	-0.53	598.5	-7.3	-0.24	ZZ
8BAKAP		654.5	44.2	1.50	665.5	59.7	1.95	ZZ
8YTXY4		631.0	20.7	0.70	619.0	13.2	0.43	ZZ
8ZAUQ3		612.0	1.7	0.06	617.5	11.7	0.38	ZZ
9G64M6	*	656.0	45.7	1.55	672.5	66.7	2.18	ZZ
9UDMKY		613.7	3.4	0.12	606.1	0.3	0.01	ZZ
A294BV		576.0	-34.3	-1.16	583.9	-21.9	-0.72	ZZ
A8JZF6		629.5	19.2	0.65	606.0	0.1	0.00	ZZ
A8WQ72		621.0	10.7	0.36	618.0	12.2	0.40	ZZ
APJ8BH		638.0	27.7	0.94	630.0	24.2	0.79	ZZ
AZ2N4P		614.0	3.7	0.13	602.0	-3.8	-0.12	ZZ
B4HD3T		588.7	-21.6	-0.73	573.6	-32.2	-1.05	ZZ
BPYN4Q		605.0	-5.3	-0.18	615.0	9.2	0.30	ZZ
CE8RHF		661.8	51.5	1.74	663.3	57.5	1.88	ZZ
CPUTXP	X	1,120.0	509.7	17.25	1,140.0	534.2	17.48	ZZ
CVGFTV		618.5	8.2	0.28	607.0	1.2	0.04	ZZ
DEQVPF		590.1	-20.1	-0.68	568.9	-36.9	-1.21	ZZ
DFY86W	*	660.0	49.7	1.68	681.0	75.2	2.46	ZZ
DGVMHT		598.5	-11.8	-0.40	611.5	5.7	0.19	ZZ
DH9XVZ	X	593.4	-16.9	-0.57	550.3	-55.5	-1.82	ZZ
DKEHKL	X	502.5	-107.8	-3.65	452.5	-153.3	-5.02	ZZ

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DVCJXP		554.0	-56.3	-1.90	543.5	-62.3	-2.04	ZZ
DW7A44		603.5	-6.8	-0.23	592.0	-13.8	-0.45	ZZ
DZ7FMG		559.0	-51.3	-1.74	573.5	-32.3	-1.06	ZZ
E4YWCF		615.2	4.9	0.16	615.3	9.4	0.31	ZZ
E6VEDG		599.4	-10.9	-0.37	579.3	-26.5	-0.87	ZZ
E7TMHU		602.0	-8.3	-0.28	607.0	1.2	0.04	ZZ
EACGJ2		625.0	14.7	0.50	598.0	-7.8	-0.26	ZZ
EMF3LQ		582.4	-27.9	-0.94	587.2	-18.7	-0.61	ZZ
ENV8H4		615.1	4.8	0.16	620.8	15.0	0.49	ZZ
ERAZBH		654.5	44.2	1.50	660.5	54.7	1.79	ZZ
EV7NRP		646.0	35.7	1.21	636.0	30.2	0.99	ZZ
F2Q7MC		549.0	-61.3	-2.07	534.5	-71.3	-2.33	ZZ
F8Y87U		593.0	-17.3	-0.58	586.5	-19.3	-0.63	ZZ
FD6ZZQ		639.0	28.7	0.97	638.0	32.2	1.05	ZZ
FJA6N4		623.0	12.7	0.43	622.5	16.7	0.55	ZZ
FY7WVY		602.0	-8.3	-0.28	584.8	-21.1	-0.69	ZZ
GHFEHN		623.0	12.7	0.43	609.0	3.2	0.10	ZZ
GMA9FP		584.5	-25.8	-0.87	594.5	-11.3	-0.37	ZZ
GPGQDL		615.2	4.9	0.16	608.8	2.9	0.10	ZZ
GQBGJZ		661.5	51.2	1.73	642.0	36.2	1.18	ZZ
HDJA2P		649.8	39.5	1.34	653.8	48.0	1.57	ZZ
HM9XYD		645.5	35.2	1.19	625.0	19.2	0.63	ZZ
JRXUZA		675.0	64.7	2.19	659.0	53.2	1.74	ZZ
K43AKJ		622.0	11.7	0.40	621.5	15.6	0.51	ZZ
K7BPRP		552.5	-57.8	-1.95	559.5	-46.3	-1.52	ZZ
KJJ8PK		667.5	57.2	1.94	647.0	41.2	1.35	ZZ
KJV4UP		662.5	52.2	1.77	650.0	44.2	1.45	ZZ
L4XEEH	X	494.0	-116.3	-3.93	495.0	-110.8	-3.63	ZZ
LJCHXR		605.5	-4.8	-0.16	594.5	-11.3	-0.37	ZZ
M6QMY8		587.5	-22.8	-0.77	570.5	-35.3	-1.16	ZZ
MAG3LT		613.0	2.7	0.09	621.0	15.2	0.50	ZZ
MJ7MRR		591.0	-19.3	-0.65	587.5	-18.3	-0.60	ZZ
MR2N96	X	594.0	-16.3	-0.55	485.0	-120.8	-3.95	ZZ
MTVEEJ		558.6	-51.7	-1.75	555.0	-50.8	-1.66	ZZ
N7G6ED	*	531.5	-78.8	-2.67	512.5	-93.3	-3.05	ZZ
NAGGAD		571.5	-38.8	-1.31	590.0	-15.8	-0.52	ZZ
NBB8FT		580.0	-30.3	-1.02	559.5	-46.3	-1.52	ZZ
NWCXYD		591.0	-19.3	-0.65	586.0	-19.8	-0.65	ZZ
PGTWFT		626.0	15.7	0.53	612.0	6.2	0.20	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
PT63QV		629.0	18.7	0.63	633.4	27.6	0.90	ZZ
QJD74K		618.0	7.7	0.26	612.0	6.2	0.20	ZZ
QWKUGN		653.5	43.2	1.46	653.5	47.7	1.56	ZZ
QZJ93R		561.5	-48.8	-1.65	554.5	-51.3	-1.68	ZZ
R7J8QM		650.0	39.7	1.34	650.0	44.2	1.45	ZZ
T8XVRE		600.0	-10.3	-0.35	600.0	-5.8	-0.19	ZZ
TC899D		593.5	-16.8	-0.57	593.0	-12.8	-0.42	ZZ
TVH2DZ		580.0	-30.3	-1.02	580.0	-25.8	-0.84	ZZ
TY22TF		593.3	-17.0	-0.58	594.0	-11.8	-0.39	ZZ
UAFDM4		609.2	-1.1	-0.04	622.9	17.0	0.56	ZZ
UEA8J6	*	615.5	5.2	0.18	581.5	-24.3	-0.80	ZZ
UGGPH2		605.0	-5.3	-0.18	593.5	-12.3	-0.40	ZZ
UH9QJH		594.0	-16.2	-0.55	606.0	0.2	0.01	ZZ
UWT9CM		580.0	-30.3	-1.02	585.0	-20.8	-0.68	ZZ
V9FUVM		590.0	-20.3	-0.69	589.5	-16.3	-0.53	ZZ
VGX7B9		650.7	40.5	1.37	644.3	38.5	1.26	ZZ
VH7F2K		623.5	13.2	0.45	619.5	13.7	0.45	ZZ
VUZQDX		630.0	19.7	0.67	611.5	5.7	0.19	ZZ
W878X9		553.1	-57.2	-1.93	553.0	-52.8	-1.73	ZZ
W9ZX4M		631.5	21.2	0.72	634.3	28.4	0.93	ZZ
WFYEHY		611.5	1.2	0.04	600.5	-5.3	-0.17	ZZ
WKQPRX		631.1	20.9	0.71	617.3	11.4	0.37	ZZ
X74Y7Z		617.0	6.7	0.23	603.0	-2.8	-0.09	ZZ
XBWXHB		610.0	-0.3	-0.01	593.0	-12.8	-0.42	ZZ
XK6B2Y		643.5	33.2	1.12	623.5	17.7	0.58	ZZ
XNLZYG		587.5	-22.8	-0.77	583.0	-22.8	-0.75	ZZ
XXAQLA		598.4	-11.9	-0.40	593.3	-12.5	-0.41	ZZ
YK36XA		597.5	-12.8	-0.43	592.0	-13.8	-0.45	ZZ
YM8TDZ		628.5	18.2	0.62	624.5	18.7	0.61	ZZ
YN3D3K		622.7	12.4	0.42	632.0	26.2	0.86	ZZ
YUQWK3		622.8	12.5	0.42	636.2	30.3	0.99	ZZ
YVY934		608.0	-2.3	-0.08	600.0	-5.8	-0.19	ZZ
Z7X2BV		598.5	-11.8	-0.40	591.0	-14.8	-0.48	ZZ
ZDC8K8		624.5	14.2	0.48	628.5	22.7	0.74	ZZ
ZYJHQV		602.0	-8.3	-0.28	602.0	-3.8	-0.12	ZZ

Analysis 606

Ultimate Elongation (percent)

		Summary Statistics	
Grand Means	610.28 percent	605.81 percent	
Std Dev Btwn Labs	29.55 percent	30.56 percent	
Statistics based on 106 of 113 reporting participants			

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #606

68BJWM (X) - Data for all Samples are high. Possible systematic error.

696A32 (X) - Inconsistency in testing between Sample groups. Data for Sample group D51-D52 are low. Data for Sample group D53-D54 are high.

CPUTXP (X) - Extreme data.

DH9XVZ (X) - Inconsistency in testing between Sample groups.

DKEHKL (X) - Data for all Samples are low. Possible systematic error. Inconsistency in testing within Sample group D53-D54.

L4XEEH (X) - Data for all Samples are low. Possible systematic error.

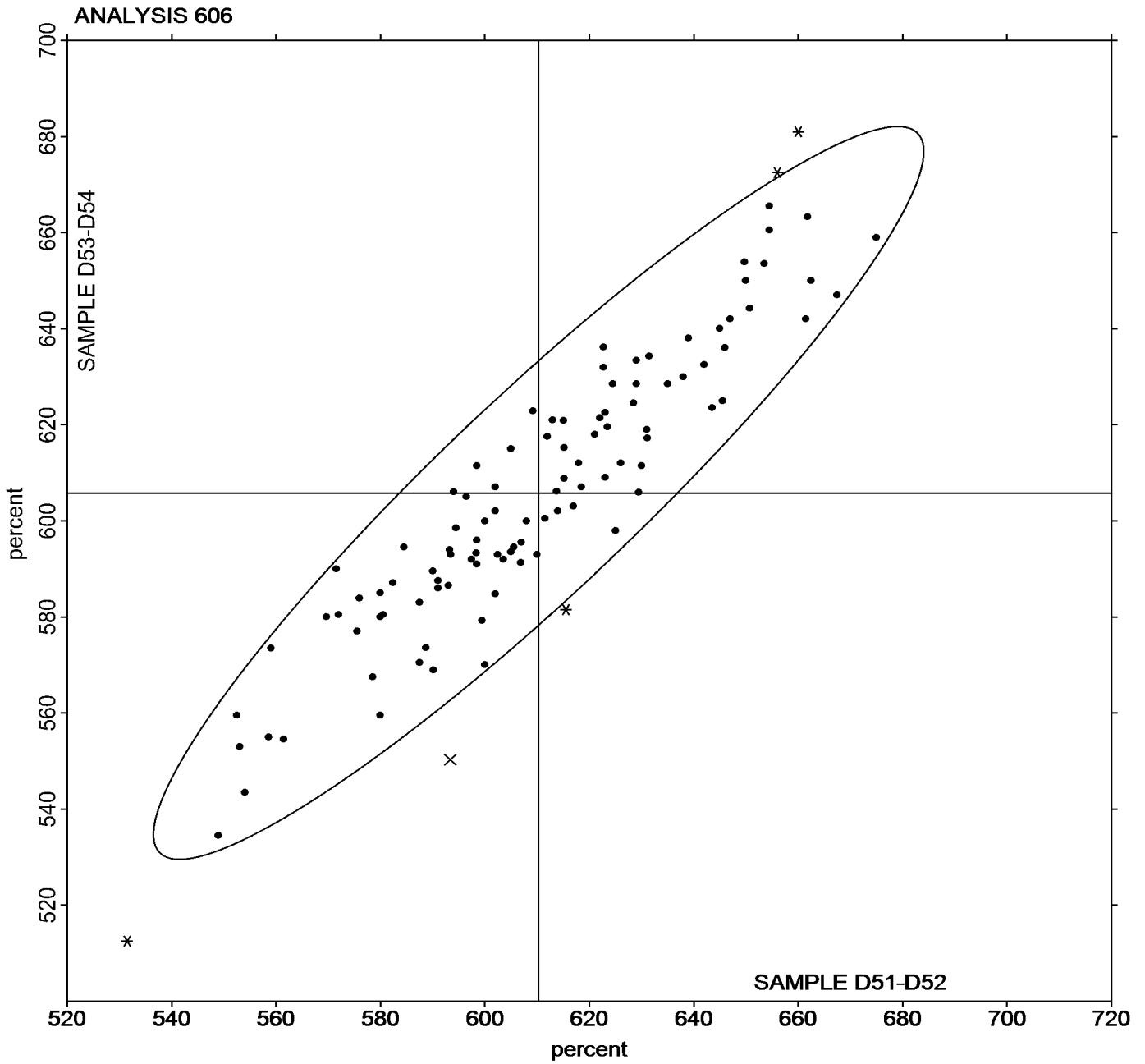
MR2N96 (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are low. Inconsistency in testing within Sample group D53-D54.

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample D51 = 610.28 percent

Grand Mean Sample D52 = 605.81 percent



Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		944.5	-26.5	-0.32	1,002.0	-4.6	-0.06	ZZ
2U3CQF		903.5	-67.5	-0.82	951.0	-55.6	-0.68	ZZ
2X3LYW		921.7	-49.3	-0.60	1,070.4	63.8	0.77	ZZ
32GFET	*	752.0	-219.0	-2.66	800.5	-206.1	-2.50	ZZ
36X6CB		1,115.0	144.0	1.75	1,166.5	159.9	1.94	ZZ
3AQ8HW		1,058.1	87.0	1.06	1,050.8	44.2	0.54	ZZ
3BLR8G		960.5	-10.5	-0.13	1,031.5	24.9	0.30	ZZ
3GCX4R		1,043.5	72.5	0.88	1,096.5	89.9	1.09	ZZ
47J7U6		946.0	-25.0	-0.30	954.0	-52.6	-0.64	ZZ
48EPW7		980.0	9.0	0.11	984.0	-22.6	-0.27	ZZ
4LKKF8		993.5	22.5	0.27	1,012.5	5.9	0.07	ZZ
4PJY3X		967.5	-3.5	-0.04	1,024.2	17.6	0.21	ZZ
4TKZ3U		988.5	17.5	0.21	1,011.4	4.8	0.06	ZZ
4TYQR6		1,029.0	58.0	0.70	1,018.0	11.4	0.14	ZZ
4WHLRC		970.3	-0.7	-0.01	1,041.4	34.8	0.42	ZZ
68BJWM	X	667.0	-304.0	-3.69	807.5	-199.1	-2.42	ZZ
696A32	X	1,374.5	403.5	4.90	1,181.0	174.4	2.12	ZZ
6V2NZC		945.7	-25.4	-0.31	968.1	-38.5	-0.47	ZZ
7RXF98		1,046.0	75.0	0.91	1,055.5	48.9	0.59	ZZ
8BAKAP		902.0	-69.0	-0.84	877.0	-129.6	-1.57	ZZ
8YTXY4		921.5	-49.5	-0.60	945.5	-61.1	-0.74	ZZ
9G64M6		950.0	-21.0	-0.26	930.0	-76.6	-0.93	ZZ
9UDMKY		998.6	27.6	0.33	980.5	-26.2	-0.32	ZZ
A294BV		1,066.8	95.7	1.16	1,042.1	35.5	0.43	ZZ
A8JZF6		893.5	-77.5	-0.94	962.8	-43.8	-0.53	ZZ
A8WQ72		928.5	-42.5	-0.52	964.0	-42.6	-0.52	ZZ
APJ8BH		772.5	-198.5	-2.41	852.5	-154.1	-1.87	ZZ
AZ2N4P		933.5	-37.5	-0.46	1,015.0	8.4	0.10	ZZ
B4HD3T		1,119.7	148.7	1.81	1,084.2	77.5	0.94	ZZ
BPYN4Q		955.1	-15.9	-0.19	902.9	-103.8	-1.26	ZZ
CE8RHF		958.3	-12.8	-0.16	927.2	-79.4	-0.96	ZZ
CVGFTV		869.5	-101.5	-1.23	989.0	-17.6	-0.21	ZZ
DEQVPF		1,084.2	113.1	1.37	1,158.1	151.5	1.84	ZZ
DFY86W	*	808.0	-163.0	-1.98	790.5	-216.1	-2.62	ZZ
DGVMHT		987.0	16.0	0.19	1,049.0	42.4	0.51	ZZ
DH9XVZ	*	1,034.1	63.1	0.77	1,192.9	186.3	2.26	ZZ
DKEHKL		903.2	-67.9	-0.82	1,022.2	15.5	0.19	ZZ
DVCJXP		1,014.5	43.5	0.53	1,099.5	92.9	1.13	ZZ
DW7A44		1,061.0	90.0	1.09	1,063.5	56.9	0.69	ZZ

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DZ7FMG		1,070.5	99.5	1.21	1,052.5	45.9	0.56	ZZ
E4YWCF		1,145.8	174.8	2.12	1,131.3	124.7	1.51	ZZ
E6VEDG		1,068.2	97.1	1.18	1,123.7	117.1	1.42	ZZ
E7TMHU		996.1	25.1	0.30	1,007.4	0.7	0.01	ZZ
EACGJ2		939.0	-32.0	-0.39	1,018.0	11.4	0.14	ZZ
EGCYXD	X	977.5	6.5	0.08	1,342.5	335.9	4.08	ZZ
EMF3LQ		1,100.7	129.7	1.58	1,107.1	100.5	1.22	ZZ
ENV8H4		981.7	10.6	0.13	954.5	-52.1	-0.63	ZZ
ERAZBH		877.5	-93.5	-1.14	884.0	-122.6	-1.49	ZZ
EV7NRP		977.6	6.5	0.08	1,013.8	7.2	0.09	ZZ
F2Q7MC		1,032.0	61.0	0.74	1,107.0	100.4	1.22	ZZ
F8Y87U		981.8	10.8	0.13	1,063.3	56.6	0.69	ZZ
FD6ZZQ		897.5	-73.5	-0.89	911.5	-95.1	-1.15	ZZ
FJA6N4		912.3	-58.7	-0.71	920.3	-86.4	-1.05	ZZ
FY7WVY	X	1,174.8	203.7	2.48	1,048.8	42.1	0.51	ZZ
GHFEHN		971.5	0.5	0.01	1,047.0	40.4	0.49	ZZ
GMA9FP		1,074.5	103.5	1.26	1,083.0	76.4	0.93	ZZ
GPGQDL		929.5	-41.5	-0.50	1,001.1	-5.5	-0.07	ZZ
GQBGJZ		892.0	-79.0	-0.96	903.5	-103.1	-1.25	ZZ
HDJA2P		871.3	-99.7	-1.21	855.7	-150.9	-1.83	ZZ
HM9XYD		892.0	-79.0	-0.96	971.8	-34.9	-0.42	ZZ
JRXUZA		791.5	-179.5	-2.18	822.5	-184.1	-2.23	ZZ
K43AKJ		1,010.9	39.9	0.48	998.0	-8.7	-0.11	ZZ
K7BPRP		1,102.5	131.5	1.60	1,112.5	105.9	1.29	ZZ
KJJ8PK		807.0	-164.0	-1.99	929.0	-77.6	-0.94	ZZ
KJV4UP		855.7	-115.3	-1.40	870.2	-136.4	-1.66	ZZ
L4XEEH	X	1,285.0	314.0	3.82	1,335.1	328.5	3.99	ZZ
LJCHXR		952.2	-18.8	-0.23	976.8	-29.8	-0.36	ZZ
M6QMY8		934.8	-36.2	-0.44	1,080.5	73.9	0.90	ZZ
MAG3LT		949.5	-21.5	-0.26	957.0	-49.6	-0.60	ZZ
MR2N96	X	937.6	-33.4	-0.41	1,028.5	21.8	0.26	ZZ
MTVEEJ	X	1,041.6	70.6	0.86	1,234.0	227.4	2.76	ZZ
N7G6ED	X	1,282.9	311.8	3.79	1,452.6	445.9	5.41	ZZ
NAGGAD		864.5	-106.5	-1.29	983.0	-23.6	-0.29	ZZ
NBB8FT		1,001.5	30.5	0.37	1,084.5	77.9	0.95	ZZ
NWCXYD		1,105.0	134.0	1.63	1,123.5	116.9	1.42	ZZ
PGTWFT		945.5	-25.5	-0.31	1,009.5	2.9	0.03	ZZ
PT63QV		1,023.1	52.0	0.63	984.5	-22.2	-0.27	ZZ
QJD74K		957.0	-14.0	-0.17	1,016.0	9.4	0.11	ZZ

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
QWKUGN		955.8	-15.2	-0.18	998.6	-8.0	-0.10	ZZ
QZJ93R		1,037.0	66.0	0.80	1,065.0	58.4	0.71	ZZ
T8XVRE		998.0	27.0	0.33	1,063.0	56.4	0.68	ZZ
TC899D		999.5	28.5	0.35	1,030.5	23.9	0.29	ZZ
TVH2DZ		1,100.1	129.1	1.57	1,078.4	71.7	0.87	ZZ
TY22TF		944.5	-26.5	-0.32	1,010.5	3.9	0.05	ZZ
UAFDM4		914.5	-56.6	-0.69	1,029.8	23.2	0.28	ZZ
UEA8J6	X	947.5	-23.5	-0.29	1,137.5	130.9	1.59	ZZ
UGGPH2		1,033.0	62.0	0.75	1,128.0	121.4	1.47	ZZ
UH9QJH		996.2	25.1	0.31	982.9	-23.7	-0.29	ZZ
UWT9CM		1,002.0	31.0	0.38	1,005.5	-1.1	-0.01	ZZ
V9FUVM		1,050.0	79.0	0.96	1,082.0	75.4	0.91	ZZ
VGX7B9		818.3	-152.7	-1.86	865.6	-141.0	-1.71	ZZ
VH7F2K		982.5	11.5	0.14	996.0	-10.6	-0.13	ZZ
VUZQDX		944.0	-27.0	-0.33	978.5	-28.1	-0.34	ZZ
W878X9		1,110.4	139.4	1.69	1,156.3	149.6	1.82	ZZ
W9ZX4M		979.8	8.7	0.11	960.4	-46.2	-0.56	ZZ
WFYEHY		985.5	14.5	0.18	994.5	-12.1	-0.15	ZZ
WKQPRX		989.6	18.6	0.23	1,086.6	79.9	0.97	ZZ
X74Y7Z		841.2	-129.8	-1.58	984.8	-21.8	-0.26	ZZ
XBWXHB		984.1	13.1	0.16	977.6	-29.1	-0.35	ZZ
XK6B2Y		898.0	-73.0	-0.89	951.5	-55.1	-0.67	ZZ
XNLZYG		1,084.2	113.1	1.37	1,148.7	142.1	1.72	ZZ
XXAQLA		958.6	-12.5	-0.15	965.2	-41.5	-0.50	ZZ
YK36XA		1,124.5	153.5	1.86	1,164.5	157.9	1.92	ZZ
YM8TDZ		833.2	-137.8	-1.67	915.2	-91.4	-1.11	ZZ
YN3D3K		1,028.6	57.6	0.70	997.8	-8.9	-0.11	ZZ
YUQWK3		940.9	-30.2	-0.37	940.9	-65.7	-0.80	ZZ
YVY934		1,007.5	36.5	0.44	990.5	-16.1	-0.20	ZZ
Z7X2BV		988.5	17.5	0.21	1,007.0	0.4	0.00	ZZ
ZDC8K8		934.5	-36.5	-0.44	933.0	-73.6	-0.89	ZZ
ZYJHQV		970.5	-0.5	-0.01	990.0	-16.6	-0.20	ZZ

Summary Statistics

Grand Means

971.02 psi

1,006.63 psi

Std Dev Btwn Labs

82.30 psi

82.39 psi

Statistics based on 101 of 110 reporting participants

Analysis 607

Stress at 300% Elongation (psi)

		Summary Statistics in SI Units	
Grand Means	6.6949 MPa	6.94	MPa
Stnd Dev Btwn Labs	0.5675 MPa	0.57	MPa
Statistics based on 101 of 110 reporting participants			

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #607

68BJWM (X) - Inconsistency in testing between Sample groups. Data for Sample group D51-D52 are low.

696A32 (X) - Data for all Samples are high. Possible systematic error.

EGCYXD (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are high.

FY7WVY (X) - Inconsistency in testing between Sample groups.

L4XEEH (X) - Data for all Samples are high. Possible systematic error.

MR2N96 (X) - Data appear to be transposed between Analysis #607 and Analysis #608. Data switched by CTS.

MTVEEJ (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are high.

N7G6ED (X) - Data for all Samples are high. Possible systematic error.

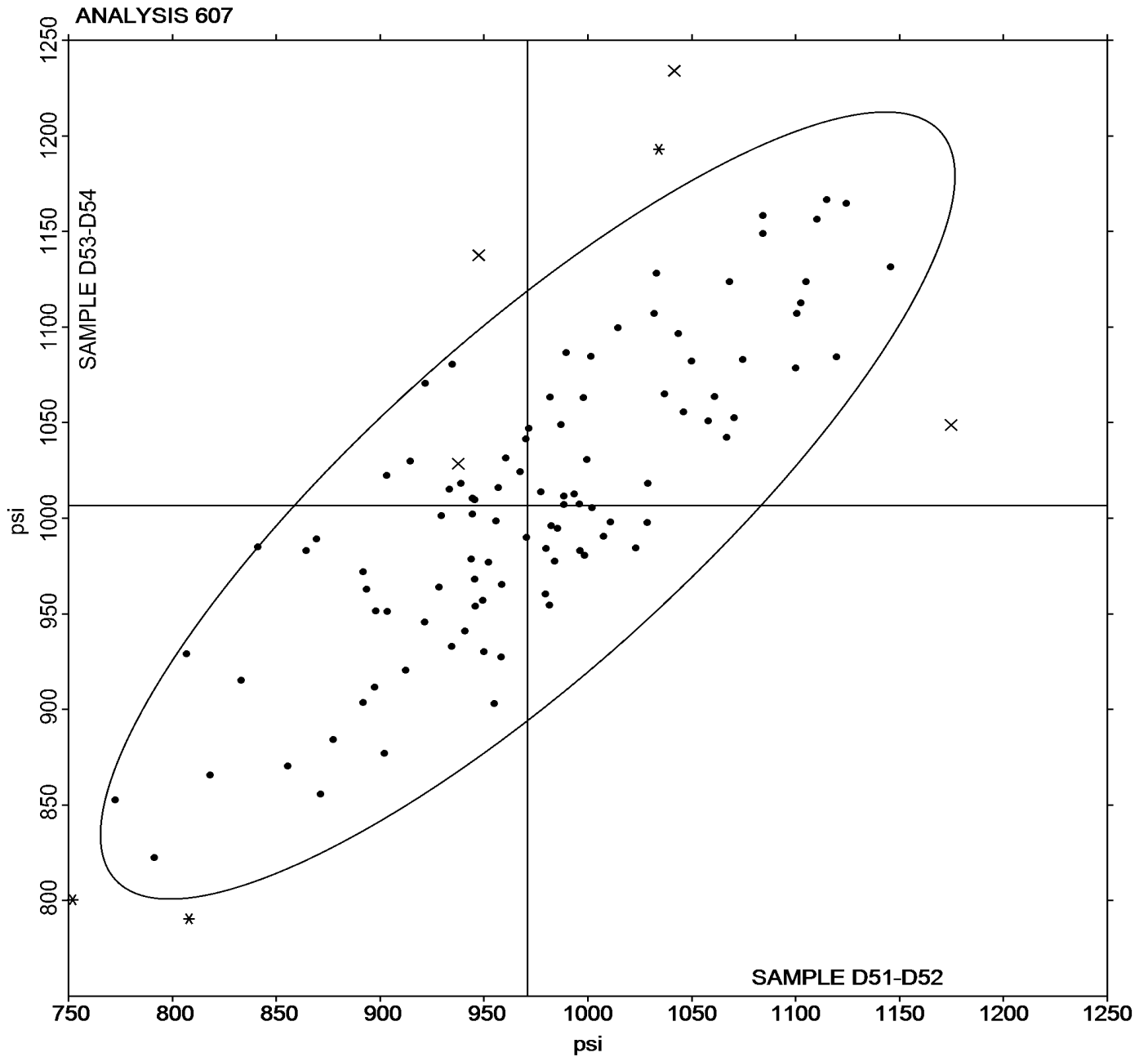
UEA8J6 (X) - Inconsistency in testing between Sample groups.

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample D51 = 971.02 psi

Grand Mean Sample D52 = 1,006.63 psi



Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		199.5	-7.8	-0.54	208.0	-6.2	-0.46	ZZ
2U3CQF		203.5	-3.8	-0.27	207.0	-7.2	-0.53	ZZ
2X3LYW		199.4	-7.9	-0.55	227.0	12.8	0.94	ZZ
32GFET	X	364.3	156.9	10.84	379.5	165.3	12.21	ZZ
36X6CB		230.5	23.2	1.60	236.5	22.3	1.65	ZZ
3AQ8HW		214.7	7.3	0.51	220.5	6.3	0.46	ZZ
3BLR8G		201.5	-5.8	-0.40	215.5	1.3	0.10	ZZ
3GCX4R		226.0	18.7	1.29	233.0	18.8	1.39	ZZ
47J7U6		211.5	4.2	0.29	212.5	-1.7	-0.13	ZZ
48EPW7		208.5	1.2	0.08	209.0	-5.2	-0.38	ZZ
4LKKF8		208.5	1.2	0.08	206.5	-7.7	-0.57	ZZ
4PJY3X		213.3	5.9	0.41	216.8	2.6	0.19	ZZ
4TKZ3U		219.8	12.5	0.86	220.8	6.6	0.49	ZZ
4TYQR6		224.0	16.7	1.15	219.5	5.3	0.39	ZZ
4WHLRC		207.4	0.1	0.00	224.1	9.9	0.73	ZZ
68BJWM		179.0	-28.3	-1.96	189.0	-25.2	-1.86	ZZ
696A32	X	279.5	72.2	4.99	236.5	22.3	1.65	ZZ
6V2NZC		198.0	-9.4	-0.65	202.3	-11.9	-0.88	ZZ
7RXF98		214.0	6.7	0.46	218.0	3.8	0.28	ZZ
8BAKAP		213.0	5.7	0.39	207.0	-7.2	-0.53	ZZ
8YTXY4		206.5	-0.8	-0.06	208.0	-6.2	-0.46	ZZ
8ZAUQ3		209.5	2.2	0.15	214.5	0.3	0.02	ZZ
9G64M6		209.5	2.2	0.15	203.0	-11.2	-0.83	ZZ
9UDMKY		208.1	0.8	0.05	202.3	-11.9	-0.88	ZZ
A294BV		224.8	17.5	1.21	221.2	7.0	0.52	ZZ
A8JZF6		206.8	-0.6	-0.04	215.9	1.7	0.12	ZZ
A8WQ72		202.5	-4.8	-0.33	207.5	-6.7	-0.50	ZZ
APJ8BH		185.0	-22.3	-1.54	199.5	-14.7	-1.09	ZZ
AZ2N4P		203.0	-4.3	-0.30	207.5	-6.7	-0.50	ZZ
B4HD3T	X	250.2	42.8	2.96	229.9	15.7	1.16	ZZ
BPYN4Q		207.4	0.1	0.00	199.4	-14.8	-1.09	ZZ
CE8RHF		222.9	15.6	1.08	216.2	2.0	0.15	ZZ
CVGFTV		189.0	-18.3	-1.27	212.5	-1.7	-0.13	ZZ
DEQVPF		230.6	23.3	1.61	245.8	31.6	2.34	ZZ
DFY86W		189.0	-18.3	-1.27	186.5	-27.7	-2.05	ZZ
DGVMHT		209.5	2.2	0.15	219.5	5.3	0.39	ZZ
DH9XVZ	*	213.2	5.9	0.40	240.8	26.6	1.96	ZZ
DKEHKL		187.9	-19.5	-1.35	210.3	-3.9	-0.29	ZZ
DVCJXP		214.0	6.7	0.46	224.5	10.3	0.76	ZZ

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DW7A44		225.0	17.7	1.22	225.0	10.8	0.80	ZZ
DZ7FMG		211.0	3.7	0.25	209.0	-5.2	-0.38	ZZ
E4YWCF	X	282.8	75.5	5.22	275.6	61.4	4.53	ZZ
E6VEDG		227.5	20.1	1.39	236.9	22.7	1.68	ZZ
E7TMHU		219.9	12.6	0.87	220.1	5.8	0.43	ZZ
EACGJ2		199.5	-7.8	-0.54	214.0	-0.2	-0.02	ZZ
EGCYXD	X	181.5	-25.8	-1.79	284.5	70.3	5.19	ZZ
EMF3LQ		227.4	20.1	1.39	227.0	12.7	0.94	ZZ
ENV8H4		202.5	-4.8	-0.33	193.5	-20.8	-1.53	ZZ
ERAZBH		187.5	-19.8	-1.37	190.5	-23.7	-1.75	ZZ
EV7NRP		212.5	5.1	0.35	227.7	13.5	1.00	ZZ
F2Q7MC		195.5	-11.8	-0.82	214.0	-0.2	-0.02	ZZ
F8Y87U		210.1	2.8	0.19	223.0	8.8	0.65	ZZ
FD6ZZQ		197.5	-9.8	-0.68	198.5	-15.7	-1.16	ZZ
FJA6N4		196.5	-10.8	-0.75	196.5	-17.7	-1.31	ZZ
FY7WVY	X	240.5	33.2	2.29	209.5	-4.7	-0.35	ZZ
GHFEHN		205.5	-1.8	-0.13	225.0	10.8	0.80	ZZ
GMA9FP		222.5	15.2	1.05	222.0	7.8	0.58	ZZ
GPGQDL		195.4	-11.9	-0.82	207.9	-6.3	-0.47	ZZ
GQBGJZ		201.5	-5.8	-0.40	203.5	-10.7	-0.79	ZZ
HDJA2P		195.8	-11.6	-0.80	198.7	-15.5	-1.15	ZZ
HM9XYD		195.8	-11.5	-0.80	203.1	-11.2	-0.82	ZZ
JRXUZA		184.0	-23.3	-1.61	190.5	-23.7	-1.75	ZZ
K43AKJ		235.3	28.0	1.93	234.0	19.8	1.46	ZZ
K7BPRP		219.5	12.2	0.84	221.5	7.3	0.54	ZZ
KJJ8PK		180.5	-26.8	-1.86	204.0	-10.2	-0.75	ZZ
KJV4UP		188.6	-18.8	-1.30	195.8	-18.4	-1.36	ZZ
L4XEEH		228.4	21.1	1.46	232.1	17.9	1.32	ZZ
LJCHXR		190.7	-16.6	-1.15	204.5	-9.7	-0.72	ZZ
M6QMY8		195.8	-11.5	-0.80	219.7	5.5	0.41	ZZ
MAG3LT		201.5	-5.8	-0.40	207.0	-7.2	-0.53	ZZ
MR2N96	X	196.3	-11.0	-0.76	198.1	-16.1	-1.19	ZZ
MTVEEJ		201.9	-5.4	-0.37	225.0	10.7	0.79	ZZ
N7G6ED	X	257.4	50.1	3.46	290.8	76.6	5.66	ZZ
NAGGAD	*	179.1	-28.2	-1.95	208.5	-5.7	-0.42	ZZ
NBB8FT		206.0	-1.3	-0.09	219.0	4.8	0.35	ZZ
NWCXYE		229.0	21.7	1.50	233.0	18.8	1.39	ZZ
PGTWFT		192.0	-15.3	-1.06	203.5	-10.7	-0.79	ZZ
PT63QV		219.2	11.9	0.82	213.2	-1.0	-0.07	ZZ

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
QJD74K		212.0	4.7	0.32	224.0	9.8	0.72	ZZ
QWKUGN		210.3	3.0	0.20	215.4	1.2	0.09	ZZ
QZJ93R	X	203.0	-4.3	-0.30	179.0	-35.2	-2.60	ZZ
T8XVRE		188.5	-18.8	-1.30	204.5	-9.7	-0.72	ZZ
TC899D		214.0	6.7	0.46	218.0	3.8	0.28	ZZ
TVH2DZ		199.4	-7.9	-0.55	192.9	-21.3	-1.57	ZZ
TY22TF		200.3	-7.1	-0.49	216.5	2.3	0.17	ZZ
UAFDM4		188.6	-18.8	-1.30	208.9	-5.4	-0.40	ZZ
UEA8J6	*	190.5	-16.8	-1.16	224.0	9.8	0.72	ZZ
UGGPH2	*	230.0	22.7	1.57	248.5	34.3	2.53	ZZ
UH9QJH		220.2	12.8	0.88	217.2	2.9	0.22	ZZ
UWT9CM		217.5	10.2	0.70	221.5	7.3	0.54	ZZ
V9FUVM		218.5	11.2	0.77	220.5	6.3	0.46	ZZ
VGX7B9		182.1	-25.3	-1.74	191.7	-22.5	-1.66	ZZ
VH7F2K		215.0	7.7	0.53	211.5	-2.7	-0.20	ZZ
VUZQDX		189.0	-18.3	-1.27	199.0	-15.2	-1.12	ZZ
W878X9		235.8	28.4	1.96	241.4	27.1	2.00	ZZ
W9ZX4M		205.6	-1.7	-0.12	209.6	-4.6	-0.34	ZZ
WFYEHY		208.5	1.2	0.08	206.5	-7.7	-0.57	ZZ
WKQPRX		221.3	13.9	0.96	243.6	29.3	2.17	ZZ
X74Y7Z		191.5	-15.9	-1.10	203.8	-10.4	-0.77	ZZ
XBWXHB		208.9	1.5	0.10	206.7	-7.5	-0.56	ZZ
XK6B2Y		196.0	-11.3	-0.78	208.0	-6.2	-0.46	ZZ
XNLZYG		224.1	16.7	1.16	234.2	20.0	1.48	ZZ
XXAQLA		213.2	5.9	0.40	213.7	-0.5	-0.04	ZZ
YK36XA		236.0	28.7	1.98	243.0	28.8	2.13	ZZ
YM8TDZ		179.1	-28.2	-1.95	198.0	-16.2	-1.20	ZZ
YN3D3K		231.6	24.2	1.67	220.6	6.4	0.47	ZZ
YUQWK3		206.6	-0.8	-0.05	209.3	-4.9	-0.37	ZZ
YVY934		235.0	27.7	1.91	228.5	14.3	1.06	ZZ
Z7X2BV		205.0	-2.3	-0.16	209.5	-4.7	-0.35	ZZ
ZDC8K8		199.5	-7.8	-0.54	198.0	-16.2	-1.20	ZZ
ZYJHQV		204.5	-2.8	-0.20	206.0	-8.2	-0.61	ZZ

Analysis 608

Stress at 100% Elongation (psi)

		Summary Statistics	
Grand Means	207.35 psi	214.21 psi	
Std Dev Btwn Labs	14.47 psi	13.54 psi	
Statistics based on 102 of 111 reporting participants			

		Summary Statistics in SI Units	
Grand Means	1.4296 MPa	1.48 MPa	
Std Dev Btwn Labs	0.0998 MPa	0.09 MPa	
Statistics based on 102 of 111 reporting participants			

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #608

32GFET (X) - Extreme data.

696A32 (X) - Data for all Samples are high. Possible systematic error.

B4HD3T (X) - Inconsistency in testing between Sample groups. Data for Sample group D51-D52 are high.

E4YWCF (X) - Data for all Samples are high. Possible systematic error.

EGCYXD (X) - Inconsistency in testing between Sample groups. Data for Sample group D53-D54 are high.

Inconsistency in testing within Sample group D53-D54.

FY7WVY (X) - Inconsistency in testing between Sample groups.

MR2N96 (X) - Data appear to be transposed between Analysis #608 and Analysis #607. Data switched by CTS.

N7G6ED (X) - Data for all Samples are high. Possible systematic error.

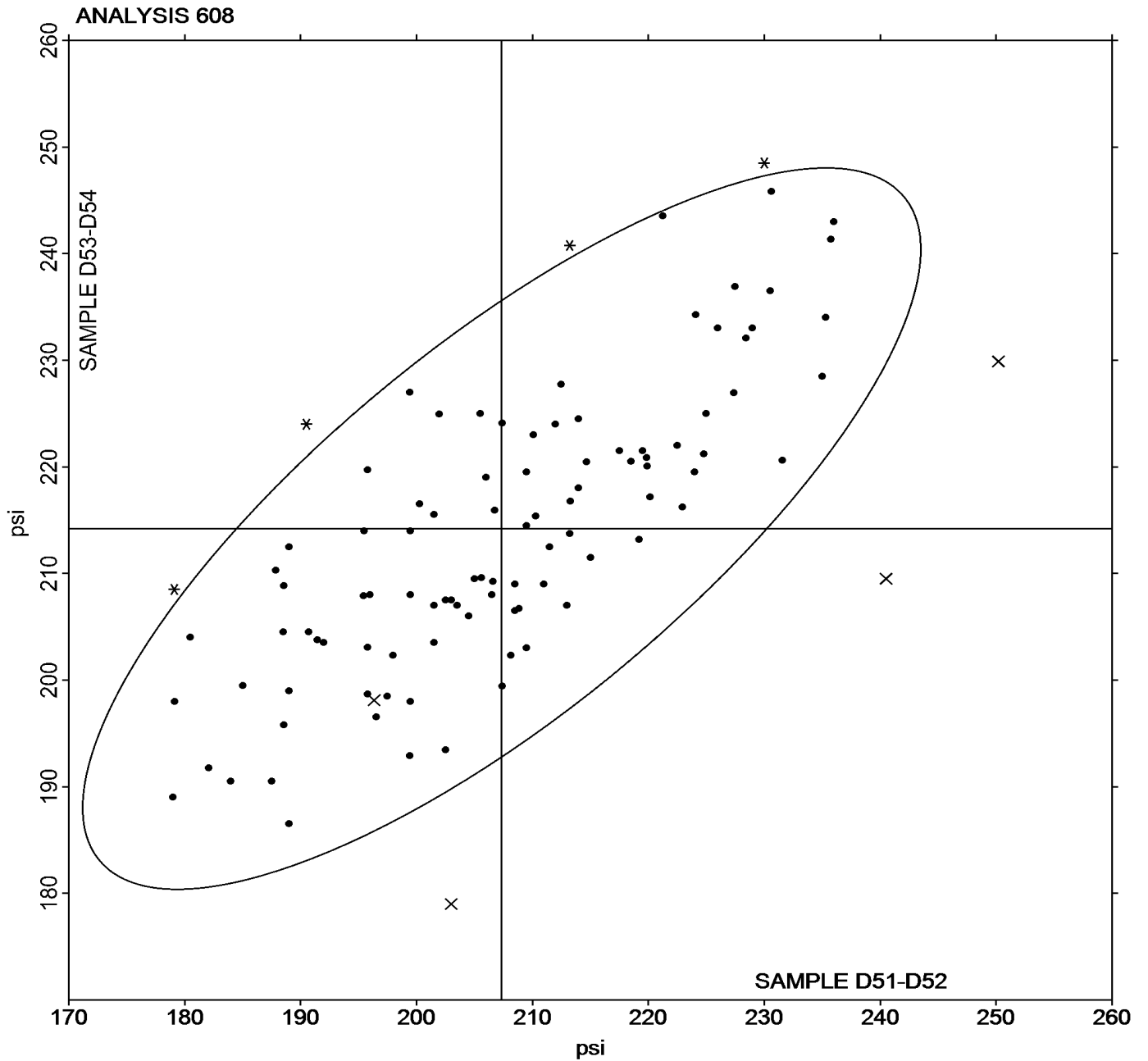
QZJ93R (X) - Inconsistency in testing between Sample groups.

Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample D51 = 207.35 psi

Grand Mean Sample D52 = 214.21 psi



Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		51.00	1.01	0.67	51.00	0.77	0.58	HH
2U3CQF		50.00	0.01	0.01	49.50	-0.73	-0.55	BT
2X3LYW		49.50	-0.49	-0.32	50.00	-0.23	-0.17	BT
32GFET	X	42.00	-7.99	-5.28	42.00	-8.23	-6.22	BT
36X6CB	*	50.00	0.01	0.01	52.00	1.77	1.34	HH
3AQ8HW		47.20	-2.79	-1.84	48.60	-1.63	-1.23	BT
3BLR8G		49.50	-0.49	-0.32	50.00	-0.23	-0.17	HH
3GCX4R		50.60	0.61	0.41	51.70	1.47	1.11	XX
47J7U6		53.00	3.01	1.99	53.00	2.77	2.09	HH
48EPW7		49.50	-0.49	-0.32	50.00	-0.23	-0.17	BT
4LKKF8		49.45	-0.54	-0.35	48.95	-1.28	-0.97	BT
4PJY3X		50.80	0.81	0.54	50.80	0.57	0.43	BT
4TKZ3U		49.50	-0.49	-0.32	49.25	-0.98	-0.74	HH
4TYQR6	*	52.00	2.01	1.33	50.00	-0.23	-0.17	HH
4WHLRC		50.50	0.51	0.34	51.00	0.77	0.58	HH
68BJWM		52.70	2.71	1.79	51.70	1.47	1.11	BT
696A32		49.75	-0.24	-0.16	49.00	-1.23	-0.93	BT
6V2Nzc		50.00	0.01	0.01	50.00	-0.23	-0.17	BT
7RXF98		50.00	0.01	0.01	49.50	-0.73	-0.55	XX
8BAKAP		50.00	0.01	0.01	50.00	-0.23	-0.17	BT
8YTXY4		49.95	-0.04	-0.02	49.60	-0.63	-0.48	BT
8ZAUQ3		48.50	-1.49	-0.98	49.50	-0.73	-0.55	XX
9G64M6		51.00	1.01	0.67	51.00	0.77	0.58	HH
9UDMKY		50.60	0.61	0.41	50.75	0.52	0.39	BT
A294BV		51.50	1.51	1.00	50.50	0.27	0.20	HH
A8JZF6		50.00	0.01	0.01	51.00	0.77	0.58	BT
A8WQ72		49.20	-0.79	-0.52	48.90	-1.33	-1.01	BT
ALJWFH		50.50	0.51	0.34	49.50	-0.73	-0.55	HH
APJ8BH		48.10	-1.89	-1.25	49.05	-1.18	-0.89	BT
AZ2N4P		50.75	0.76	0.51	50.95	0.72	0.54	XX
B4HD3T		52.00	2.01	1.33	51.10	0.87	0.66	BT
BDJ2T4		53.00	3.01	1.99	52.00	1.77	1.34	HH
BPYN4Q		50.00	0.01	0.01	50.00	-0.23	-0.17	HH
CE8RHF		50.00	0.01	0.01	50.25	0.02	0.01	HH
CPUTXP		50.50	0.51	0.34	49.00	-1.23	-0.93	HH
CVGFTV		48.00	-1.99	-1.31	49.50	-0.73	-0.55	BT
DFY86W		52.95	2.96	1.96	52.55	2.32	1.75	BT
DGVMHT		51.00	1.01	0.67	51.00	0.77	0.58	HH
DH9XVZ		50.50	0.51	0.34	50.00	-0.23	-0.17	HH

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DKEHKL		47.60	-2.39	-1.58	49.50	-0.73	-0.55	BT
DVCJXP		50.00	0.01	0.01	50.00	-0.23	-0.17	HH
DW7A44		49.50	-0.49	-0.32	49.00	-1.23	-0.93	BT
DW82YQ		50.00	0.01	0.01	51.00	0.77	0.58	BT
DZ7FMG	X	45.00	-4.99	-3.29	44.50	-5.73	-4.33	BT
E4YWCF		51.00	1.01	0.67	51.50	1.27	0.96	XX
E6VEDG		47.00	-2.99	-1.97	48.00	-2.23	-1.69	BT
EACGJ2		49.50	-0.49	-0.32	50.00	-0.23	-0.17	BT
EGCYXD		49.00	-0.99	-0.65	50.85	0.62	0.47	HH
EMF3LQ		48.00	-1.99	-1.31	48.00	-2.23	-1.69	XX
ENV8H4		52.50	2.51	1.66	53.00	2.77	2.09	XX
ERAZBH		49.50	-0.49	-0.32	50.50	0.27	0.20	XX
EV7NRP		48.10	-1.89	-1.25	48.65	-1.58	-1.19	BT
F2Q7MC		49.35	-0.64	-0.42	50.40	0.17	0.13	BT
F8Y87U		51.00	1.01	0.67	50.50	0.27	0.20	BT
FD6ZZQ		49.25	-0.74	-0.49	49.80	-0.43	-0.33	XX
FJA6N4		48.20	-1.79	-1.18	49.35	-0.88	-0.67	BT
FY7WVY		51.00	1.01	0.67	50.50	0.27	0.20	XX
GHFHFN		49.50	-0.49	-0.32	49.75	-0.48	-0.36	BT
GMA9FP		50.00	0.01	0.01	49.00	-1.23	-0.93	HH
GPGQDL		49.30	-0.69	-0.45	49.45	-0.78	-0.59	BT
GQBGJZ		51.50	1.51	1.00	52.50	2.27	1.71	HH
HDJA2P		48.50	-1.49	-0.98	49.00	-1.23	-0.93	BT
HM9XYD		49.80	-0.19	-0.12	50.35	0.12	0.09	XX
JRXUZA		49.50	-0.49	-0.32	50.50	0.27	0.20	BT
K43AKJ		49.50	-0.49	-0.32	48.50	-1.73	-1.31	BT
K7BPRP		48.80	-1.19	-0.78	48.25	-1.98	-1.50	BT
KJJ8PK		50.00	0.01	0.01	50.50	0.27	0.20	BT
KJV4UP		53.00	3.01	1.99	53.00	2.77	2.09	XX
L4XEEH		49.40	-0.59	-0.39	49.65	-0.58	-0.44	BT
LA499E		50.00	0.01	0.01	51.50	1.27	0.96	BT
LJCHXR		52.60	2.61	1.73	52.30	2.07	1.56	BT
LV8U9K		49.00	-0.99	-0.65	49.50	-0.73	-0.55	BT
M6QMY8		52.50	2.51	1.66	53.00	2.77	2.09	HH
MAG3LT	*	52.50	2.51	1.66	53.50	3.27	2.47	XX
MJ7MRR		51.00	1.01	0.67	51.00	0.77	0.58	HH
MR2N96		50.50	0.51	0.34	50.00	-0.23	-0.17	HH
MTVEEJ		49.50	-0.49	-0.32	49.00	-1.23	-0.93	XX
N7G6ED		50.50	0.51	0.34	51.00	0.77	0.58	BT

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
NAGGAD		49.50	-0.49	-0.32	50.75	0.52	0.39	BT
NBB8FT		48.15	-1.84	-1.21	48.35	-1.88	-1.42	BT
NWCXYE		48.50	-1.49	-0.98	49.25	-0.98	-0.74	HH
P9YMA4		47.50	-2.49	-1.64	48.00	-2.23	-1.69	BT
PGTWFT		50.75	0.76	0.51	51.25	1.02	0.77	XX
PT63QV		51.00	1.01	0.67	50.45	0.22	0.16	BT
QJD74K		49.00	-0.99	-0.65	49.00	-1.23	-0.93	BT
QWKUGN		49.65	-0.34	-0.22	50.05	-0.18	-0.14	BT
QZJ93R		52.50	2.51	1.66	53.00	2.77	2.09	HH
R7J8QM		51.00	1.01	0.67	51.00	0.77	0.58	XX
RFTC4D	*	46.00	-3.99	-2.63	47.00	-3.23	-2.44	BT
T8XVRE		48.50	-1.49	-0.98	50.00	-0.23	-0.17	HH
TC899D		50.00	0.01	0.01	50.50	0.27	0.20	HH
TVH2DZ		52.50	2.51	1.66	52.50	2.27	1.71	XX
TY22TF		51.00	1.01	0.67	51.00	0.77	0.58	HH
UAFDM4		47.55	-2.44	-1.61	48.10	-2.13	-1.61	XX
UEA8J6		49.50	-0.49	-0.32	50.50	0.27	0.20	BT
UGGPH2		47.80	-2.19	-1.44	48.70	-1.53	-1.16	XX
UH9QJH		51.50	1.51	1.00	50.50	0.27	0.20	XX
UWT9CM		50.90	0.91	0.60	50.95	0.72	0.54	BT
V9FUVM		51.35	1.36	0.90	51.30	1.07	0.81	BT
VGX7B9		49.00	-0.99	-0.65	50.00	-0.23	-0.17	XX
VH7F2K		51.00	1.01	0.67	50.00	-0.23	-0.17	BT
VUZQDX		49.60	-0.39	-0.25	49.85	-0.38	-0.29	BT
W86E2L		48.10	-1.89	-1.25	48.90	-1.33	-1.01	BT
W878X9		52.00	2.01	1.33	52.05	1.82	1.37	BT
W9ZX4M		50.80	0.81	0.54	50.95	0.72	0.54	BT
WFYEHY		51.00	1.01	0.67	51.50	1.27	0.96	XX
WKQPRX	X	55.40	5.41	3.58	56.50	6.27	4.73	BT
X74Y7Z		49.00	-0.99	-0.65	50.00	-0.23	-0.17	BT
XK6B2Y		49.50	-0.49	-0.32	50.50	0.27	0.20	XX
XNLZYG		51.35	1.36	0.90	51.95	1.72	1.30	BT
XTZD7W		48.45	-1.54	-1.01	49.55	-0.68	-0.51	XX
XXAQLA		49.20	-0.79	-0.52	49.35	-0.88	-0.67	XX
YK36XA		51.50	1.51	1.00	52.00	1.77	1.34	HH
YM8TDZ		46.45	-3.54	-2.34	47.85	-2.38	-1.80	BT
YN3D3K		49.45	-0.54	-0.35	49.45	-0.78	-0.59	BT
YUQWK3		50.00	0.01	0.01	49.00	-1.23	-0.93	XX
YVY934		51.75	1.76	1.17	51.00	0.77	0.58	HH

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Z7X2BV		50.00	0.01	0.01	50.00	-0.23	-0.17	HH
ZDC8K8	*	45.50	-4.49	-2.96	46.60	-3.63	-2.74	BT
ZYJHQV		50.00	0.01	0.01	50.50	0.27	0.20	XX

Summary Statistics	
Grand Means	49.985 Type A
	50.232 Type A
Stnd Dev Btwn Labs	1.513 Type A
	1.324 Type A
Statistics based on 117 of 120 reporting participants	

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

32GFET (X) - Data for all Samples are low. Possible systematic error.

DZ7FMG (X) - Data for all Samples are low. Possible systematic error.

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

Results by Reading Time (as reported by laboratory)

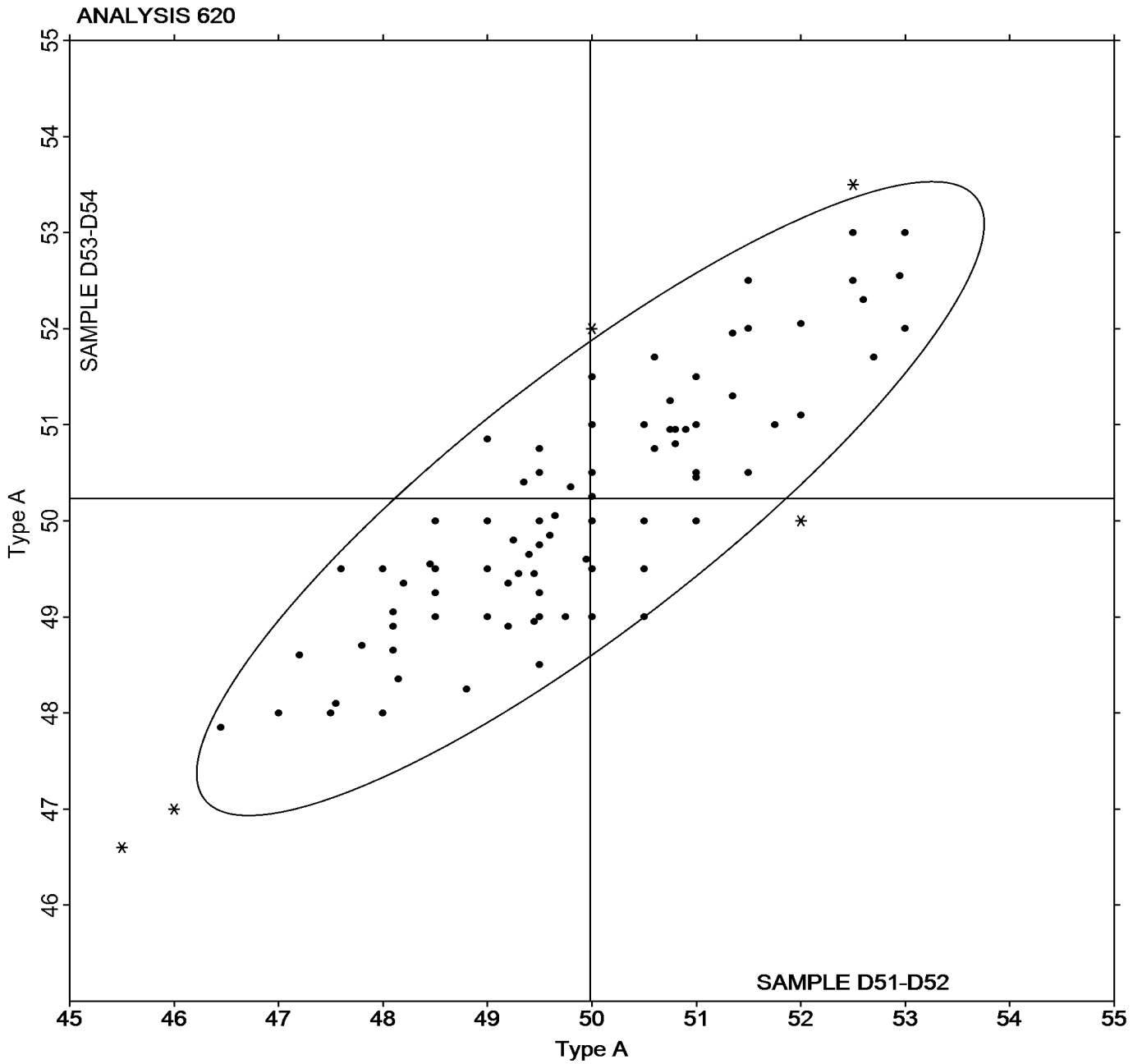
Reading Time	Sample D51 <i>Polyisoprene compound, batch #1</i>			Sample D52 <i>Polyisoprene compound, batch #1</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Readings taken within 0 - 5 seconds	50.25	1.32	0.26	50.43	1.14	0.20	81	88
Readings taken at 5 seconds	48.23	0.83	-1.75	48.58	0.54	-1.65	13	13
Readings taken after 5+ seconds	49.34	1.04	-0.65	50.12	0.74	-0.11	5	6
Maximum hardness indicator used	50.67	1.07	0.68	50.85	1.04	0.62	13	13

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample D51 = 49.985 Type A

Grand Mean Sample D52 = 50.232 Type A



Analysis 621

Density

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
23CYGU		1.137	0.000	0.00	1.137	-0.001	-0.19	ZZ
2U3CQF		1.137	-0.001	-0.33	1.137	-0.001	-0.34	ZZ
2X3LYW		1.137	0.000	-0.14	1.140	0.002	0.77	ZZ
36X6CB		1.140	0.002	0.83	1.141	0.003	1.14	ZZ
3AQ8HW		1.140	0.003	1.02	1.140	0.002	0.77	ZZ
3BLR8G		1.140	0.002	0.83	1.140	0.002	0.77	ZZ
3GCX4R		1.140	0.003	1.02	1.141	0.003	1.14	ZZ
48EPW7		1.139	0.002	0.69	1.139	0.001	0.49	ZZ
4LKKF8		1.139	0.002	0.66	1.140	0.002	0.77	ZZ
4PJY3X		1.136	-0.002	-0.60	1.136	-0.002	-0.75	ZZ
4TYQR6	X	1.146	0.009	3.46	1.149	0.011	4.06	ZZ
4WHLRC		1.138	0.001	0.27	1.139	0.001	0.21	ZZ
68BJWM	X	1.175	0.038	14.55	1.155	0.017	6.32	ZZ
696A32		1.136	-0.001	-0.35	1.137	-0.001	-0.23	ZZ
8BAKAP		1.139	0.002	0.71	1.139	0.001	0.38	ZZ
8YTXY4		1.138	0.000	0.06	1.141	0.003	0.95	ZZ
8ZAUQ3		1.141	0.004	1.54	1.141	0.003	1.21	ZZ
A8JZF6	X	1.129	-0.008	-3.23	1.128	-0.010	-3.67	ZZ
A8WQ72		1.142	0.005	1.80	1.143	0.005	1.88	ZZ
APJ8BH	*	1.133	-0.005	-1.87	1.136	-0.002	-0.71	ZZ
AZ2N4P		1.134	-0.003	-1.30	1.134	-0.004	-1.30	ZZ
B4HD3T	*	1.130	-0.007	-2.66	1.130	-0.008	-2.95	ZZ
BDJ2T4		1.139	0.002	0.68	1.139	0.001	0.45	ZZ
BPYN4Q		1.140	0.003	1.02	1.141	0.003	0.95	ZZ
CE8RHF		1.139	0.001	0.46	1.138	0.000	0.16	ZZ
CVGFTV		1.135	-0.002	-0.91	1.137	-0.001	-0.34	ZZ
DGVMHT		1.142	0.004	1.68	1.143	0.005	1.84	ZZ
DKEHKL	X	1.089	-0.048	-18.70	1.087	-0.050	-18.68	ZZ
DW7A44		1.136	-0.001	-0.52	1.137	-0.001	-0.53	ZZ
DZ7FMG		1.135	-0.002	-0.91	1.137	-0.001	-0.53	ZZ
E4YWCF		1.132	-0.005	-2.07	1.134	-0.004	-1.45	ZZ
E6VEDG		1.137	-0.001	-0.33	1.136	-0.002	-0.71	ZZ
EGCYXD		1.135	-0.002	-0.91	1.134	-0.004	-1.64	ZZ
EMF3LQ		1.133	-0.005	-1.87	1.134	-0.004	-1.64	ZZ
ERAZBH		1.137	-0.001	-0.25	1.138	0.000	0.16	ZZ
EV7NRP	X	1.135	-0.002	-0.91	1.142	0.004	1.51	ZZ
F2Q7MC	X	1.141	0.003	1.22	1.137	-0.001	-0.34	ZZ
F8Y87U		1.142	0.004	1.60	1.140	0.002	0.58	ZZ
FD6ZZQ		1.136	-0.002	-0.64	1.136	-0.002	-0.71	ZZ

Analysis 621

Density

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
FY7WVY	X	1.100	-0.038	-14.57	1.097	-0.041	-15.33	ZZ
GHFHFN		1.136	-0.002	-0.60	1.134	-0.004	-1.49	ZZ
GPGQDL		1.135	-0.002	-0.77	1.134	-0.004	-1.32	ZZ
GQBGJZ		1.137	-0.001	-0.33	1.137	-0.001	-0.34	ZZ
HDJA2P		1.141	0.004	1.54	1.141	0.003	1.29	ZZ
HM9XYD		1.137	-0.001	-0.33	1.137	-0.001	-0.34	ZZ
JRXUZA		1.135	-0.002	-0.91	1.137	-0.001	-0.34	ZZ
K43AKJ	X	1.127	-0.011	-4.14	1.129	-0.009	-3.15	ZZ
K7BPRP		1.136	-0.001	-0.50	1.137	-0.001	-0.29	ZZ
KJ8PK		1.138	0.000	0.08	1.137	-0.001	-0.32	ZZ
LA499E		1.138	0.000	0.06	1.139	0.001	0.21	ZZ
LJCHXR		1.134	-0.004	-1.49	1.133	-0.005	-1.82	ZZ
M6QMY8		1.140	0.003	1.02	1.140	0.002	0.77	ZZ
MR2N96	X	1.161	0.023	8.94	1.167	0.029	10.76	ZZ
N7G6ED		1.137	0.000	0.04	1.137	-0.001	-0.32	ZZ
NWCXYE		1.133	-0.005	-1.87	1.133	-0.005	-1.77	ZZ
QWKUGN		1.138	0.000	0.06	1.137	-0.001	-0.34	ZZ
QZJ93R	X	1.147	0.009	3.67	1.149	0.011	3.91	ZZ
TC899D		1.136	-0.002	-0.72	1.138	0.000	0.03	ZZ
TY22TF		1.139	0.001	0.50	1.139	0.001	0.55	ZZ
UAFDM4		1.135	-0.002	-0.77	1.136	-0.002	-0.62	ZZ
UH9QJH		1.139	0.002	0.64	1.139	0.001	0.21	ZZ
UWT9CM		1.138	0.000	0.19	1.140	0.002	0.68	ZZ
V9FUVM		1.141	0.003	1.22	1.142	0.004	1.51	ZZ
VGX7B9		1.141	0.003	1.35	1.143	0.005	1.82	ZZ
VH7F2K		1.137	-0.001	-0.33	1.135	-0.003	-1.08	ZZ
VUZQDX		1.138	0.000	0.06	1.138	0.000	-0.16	ZZ
W878X9		1.135	-0.002	-0.91	1.137	-0.001	-0.34	ZZ
W9ZX4M		1.141	0.004	1.53	1.141	0.003	1.29	ZZ
WFYEHY		1.137	0.000	-0.14	1.137	-0.001	-0.21	ZZ
WKQPRX	X	1.137	-0.001	-0.33	1.133	-0.005	-2.01	ZZ
X74Y7Z		1.136	-0.002	-0.72	1.137	-0.001	-0.34	ZZ
XK6B2Y		1.138	0.001	0.35	1.138	0.000	-0.10	ZZ
XNLZYG		1.142	0.004	1.70	1.143	0.005	1.94	ZZ
YM8TDZ		1.139	0.002	0.64	1.138	0.000	0.03	ZZ
YN3D3K	*	1.138	0.000	0.13	1.141	0.003	1.27	ZZ
YUQWK3		1.139	0.001	0.44	1.139	0.001	0.21	ZZ
YVY934		1.139	0.002	0.71	1.138	0.000	0.07	ZZ
Z7X2BV		1.135	-0.002	-0.91	1.135	-0.003	-1.08	ZZ

Analysis 621

Density

WebCode	Data Flag	Sample D51			Sample D52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
ZYJHQP		1.137	-0.001	-0.19	1.138	0.000	0.10	ZZ

Summary Statistics			
Grand Means	1.1374	Mg/M ³	1.1379 Mg/M ³
Std Dev Btwn Labs	0.0026	Mg/M ³	0.0027 Mg/M ³
Statistics based on 68 of 79 reporting participants			

Samples D51-D52: Polyisoprene compound, batch #1 & D53-D54: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #621

4TYQR6 (X) - Data for all Samples are high. Possible systematic error. Inconsistency in testing within Sample group D51-D52.

68BJWM (X) - Extreme data.

A8JZF6 (X) - Data for all Samples are low. Possible systematic error. Inconsistency in testing within Sample group D53-D54.

DKEHKL (X) - Extreme data.

EV7NRP (X) - Inconsistency in testing between Sample groups. Inconsistent in testing within Sample group D51-D52.

F2Q7MC (X) - Inconsistency in testing between Sample groups.

FY7WVY (X) - Extreme data.

K43AKJ (X) - Data for all Samples are low. Possible systematic error.

MR2N96 (X) - Extreme data.

QZJ93R (X) - Data for all Samples are high. Possible systematic error.

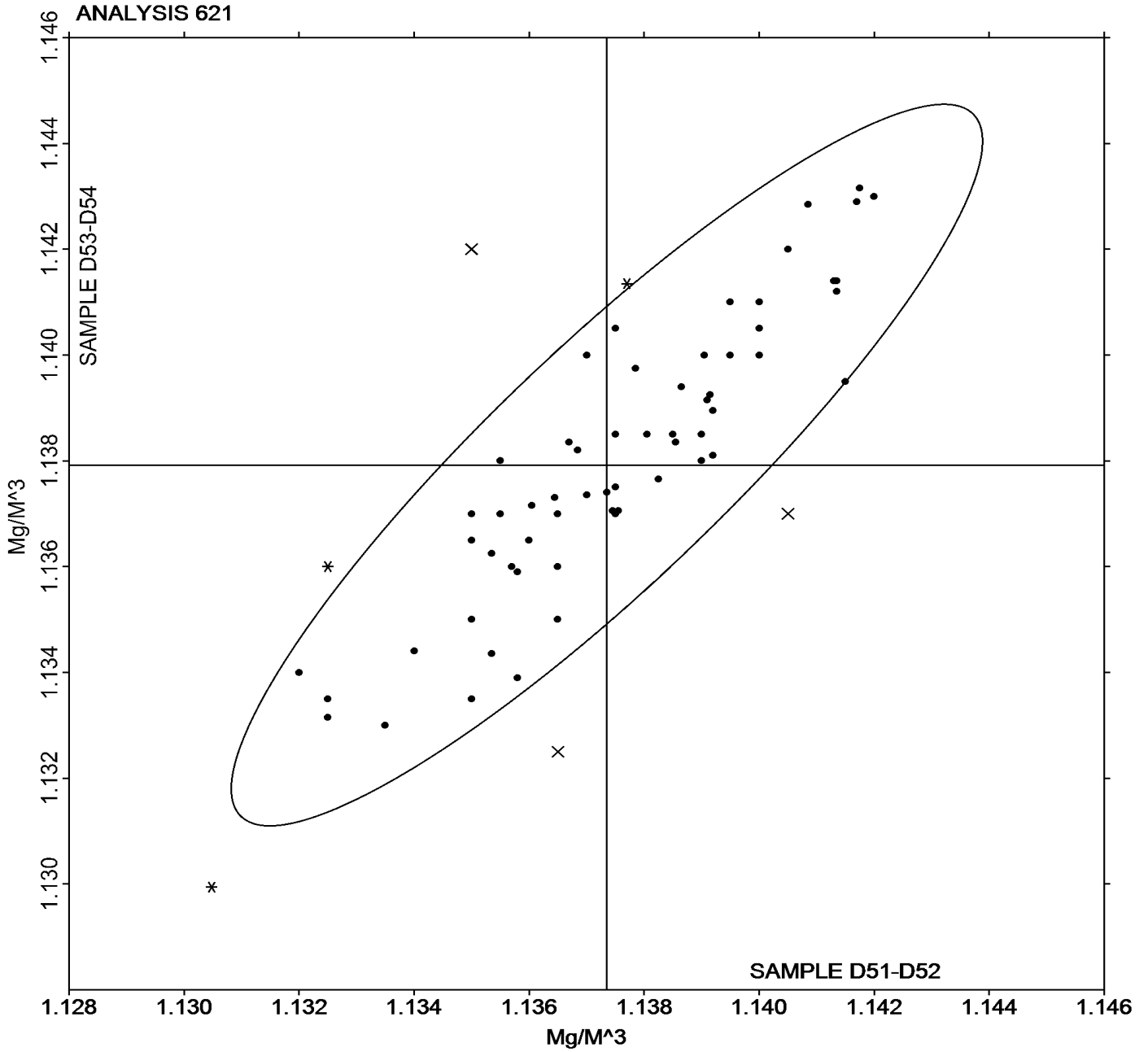
WKQPRX (X) - Inconsistency in testing between Sample groups.

Analysis 621

Density

Grand Mean Sample D51 = 1.1374 Mg/M³

Grand Mean Sample D52 = 1.1379 Mg/M³



Analysis 630

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

WebCode	Data Flag	Sample M51			Sample M52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		3,366.5	85.7	0.67	3,295.5	133.9	0.53	ZZ
3BLR8G		3,181.5	-99.3	-0.77	3,033.5	-128.1	-0.51	ZZ
4TYQR6		3,428.5	147.7	1.15	3,266.5	104.9	0.42	ZZ
4WHLRC		3,255.4	-25.4	-0.20	3,181.4	19.9	0.08	ZZ
8YTX4		3,220.0	-60.8	-0.47	3,122.5	-39.1	-0.15	ZZ
9UDMKY		3,277.9	-3.0	-0.02	3,082.1	-79.5	-0.32	ZZ
AZ2N4P		3,237.5	-43.3	-0.34	3,177.5	15.9	0.06	ZZ
B4HD3T		3,422.2	141.4	1.10	3,447.6	286.0	1.13	ZZ
CVGFTV		3,064.5	-216.3	-1.68	3,209.0	47.4	0.19	ZZ
DFY86W		3,210.0	-70.8	-0.55	2,917.0	-244.6	-0.97	ZZ
DGVMHT		3,237.6	-43.2	-0.34	3,255.0	93.4	0.37	ZZ
DZ7FMG		3,528.5	247.7	1.93	3,371.5	209.9	0.83	ZZ
E6VEDG		3,354.1	73.3	0.57	3,395.2	233.6	0.93	ZZ
E7TMHU		3,304.8	23.9	0.19	3,145.5	-16.1	-0.06	ZZ
EMF3LQ		3,436.7	155.8	1.21	3,512.2	350.6	1.39	ZZ
ENV8H4		3,445.3	164.4	1.28	3,143.9	-17.7	-0.07	ZZ
F8Y87U		3,307.1	26.2	0.20	3,209.5	47.9	0.19	ZZ
FD6ZZQ		3,292.0	11.2	0.09	2,978.0	-183.6	-0.73	ZZ
GMA9FP	*	3,264.0	-16.8	-0.13	2,428.5	-733.1	-2.91	ZZ
K43AKJ	*	3,359.3	78.4	0.61	2,431.7	-729.9	-2.89	ZZ
KJV4UP		3,379.4	98.6	0.77	3,321.4	159.8	0.63	ZZ
MTVEEJ		3,133.5	-147.3	-1.15	3,246.5	84.9	0.34	ZZ
QWKUGN		3,037.1	-243.7	-1.90	3,000.1	-161.4	-0.64	ZZ
TC899D		3,172.5	-108.3	-0.84	2,782.5	-379.1	-1.50	ZZ
UAFDM4		3,002.3	-278.5	-2.17	3,270.6	109.1	0.43	ZZ
UEA8J6		3,303.0	22.2	0.17	3,231.0	69.4	0.28	ZZ
UGGPH2		3,312.0	31.2	0.24	3,250.0	88.4	0.35	ZZ
W878X9		3,193.4	-87.4	-0.68	3,297.5	135.9	0.54	ZZ
W9ZX4M		3,316.1	35.3	0.27	3,227.1	65.5	0.26	ZZ
XNLZYG		3,505.6	224.8	1.75	3,565.8	404.2	1.60	ZZ
YM8TDZ		3,045.8	-235.0	-1.83	3,285.1	123.6	0.49	ZZ
YN3D3K		3,320.7	39.8	0.31	3,320.1	158.5	0.63	ZZ
YVY934		3,333.0	52.2	0.41	2,839.5	-322.1	-1.28	ZZ
ZDC8K8		3,301.0	20.2	0.16	3,252.5	90.9	0.36	ZZ

Analysis 630

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

Summary Statistics

Grand Means

3,280.84 psi

3,161.56 psi

Std Dev Btwn Labs

128.59 psi

252.28 psi

Statistics based on 34 of 34 reporting participants

Summary Statistics in SI Units

Grand Means

22.620 MPa

21.80 MPa

Std Dev Btwn Labs

0.887 MPa

1.74 MPa

Statistics based on 34 of 34 reporting participants

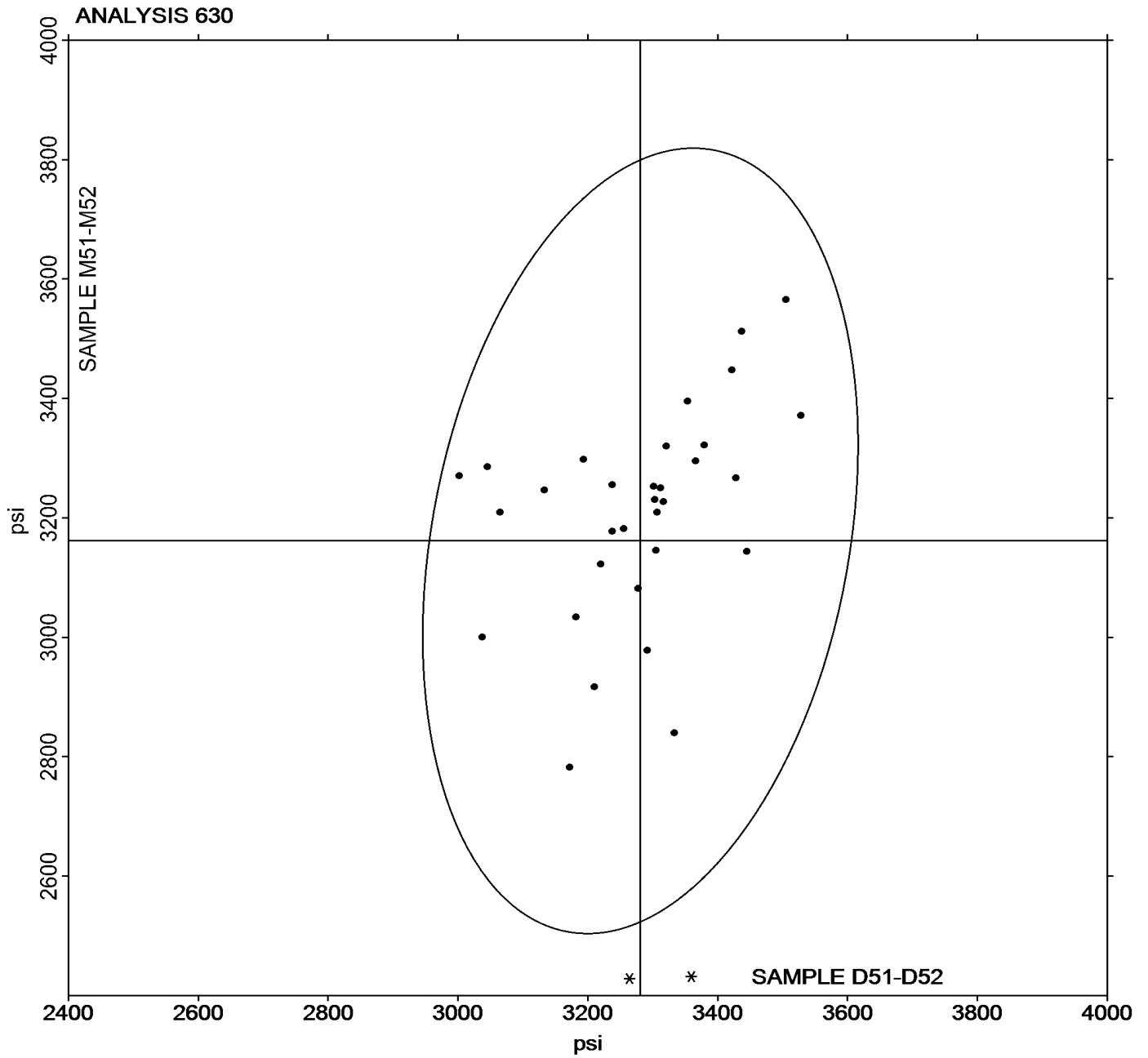
All samples : Polyisoprene compound, batch #1

Analysis 630

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

Grand Mean Sample M51 = 3,280.84 psi

Grand Mean Sample M52 = 3,161.56 psi



Analysis 631

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

WebCode	Data Flag	Sample M51			Sample M52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		647.0	36.5	1.37	630.0	39.1	1.39	ZZ
3BLR8G		598.5	-12.0	-0.45	573.0	-17.9	-0.64	ZZ
4TYQR6		629.0	18.5	0.69	598.5	7.6	0.27	ZZ
4WHLRC		607.0	-3.5	-0.13	583.5	-7.4	-0.26	ZZ
8YTXY4		631.0	20.5	0.77	601.0	10.1	0.36	ZZ
9UDMKY		613.7	3.2	0.12	588.8	-2.1	-0.08	ZZ
AZ2N4P		614.0	3.5	0.13	594.0	3.1	0.11	ZZ
B4HD3T		588.7	-21.8	-0.82	573.8	-17.2	-0.61	ZZ
CVGFTV		618.5	8.0	0.30	606.5	15.6	0.55	ZZ
DFY86W	*	660.0	49.5	1.86	669.5	78.6	2.80	ZZ
DGVMHT		598.5	-12.0	-0.45	588.0	-2.9	-0.10	ZZ
DZ7FMG	*	559.0	-51.5	-1.93	576.0	-14.9	-0.53	ZZ
E6VEDG	*	599.4	-11.1	-0.41	542.0	-48.9	-1.74	ZZ
E7TMHU		602.0	-8.5	-0.32	563.5	-27.4	-0.98	ZZ
EMF3LQ		582.4	-28.1	-1.05	572.7	-18.2	-0.65	ZZ
ENV8H4		615.1	4.6	0.17	602.6	11.7	0.42	ZZ
F8Y87U		593.0	-17.5	-0.65	554.0	-36.9	-1.31	ZZ
FD6ZZQ		639.0	28.5	1.07	617.0	26.1	0.93	ZZ
GMA9FP		584.5	-26.0	-0.97	567.0	-23.9	-0.85	ZZ
K43AKJ		622.0	11.5	0.43	580.7	-10.3	-0.37	ZZ
KJV4UP		662.5	52.0	1.95	646.0	55.1	1.96	ZZ
MTVEEJ		558.6	-51.9	-1.94	566.5	-24.5	-0.87	ZZ
QWKUGN		653.5	43.0	1.61	632.0	41.1	1.46	ZZ
TC899D		593.5	-17.0	-0.64	591.0	0.1	0.00	ZZ
UAFDM4		609.2	-1.3	-0.05	585.8	-5.1	-0.18	ZZ
UEA8J6		615.5	5.0	0.19	572.5	-18.4	-0.66	ZZ
UGGPH2		605.0	-5.5	-0.20	592.0	1.1	0.04	ZZ
W878X9		553.1	-57.4	-2.15	544.5	-46.4	-1.65	ZZ
W9ZX4M		631.5	21.0	0.79	604.0	13.1	0.46	ZZ
XNLZYG		587.5	-23.0	-0.86	550.5	-40.4	-1.44	ZZ
YM8TDZ		628.5	18.0	0.68	608.5	17.6	0.63	ZZ
YN3D3K		622.7	12.2	0.46	606.4	15.4	0.55	ZZ
YVY934		608.0	-2.5	-0.09	597.0	6.1	0.22	ZZ
ZDC8K8		624.5	14.0	0.53	613.0	22.1	0.79	ZZ

Analysis 631

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

		Summary Statistics	
Grand Means	610.46 percent		590.93 percent
Std Dev Btwn Labs	26.70 percent		28.11 percent
Statistics based on 34 of 34 reporting participants			

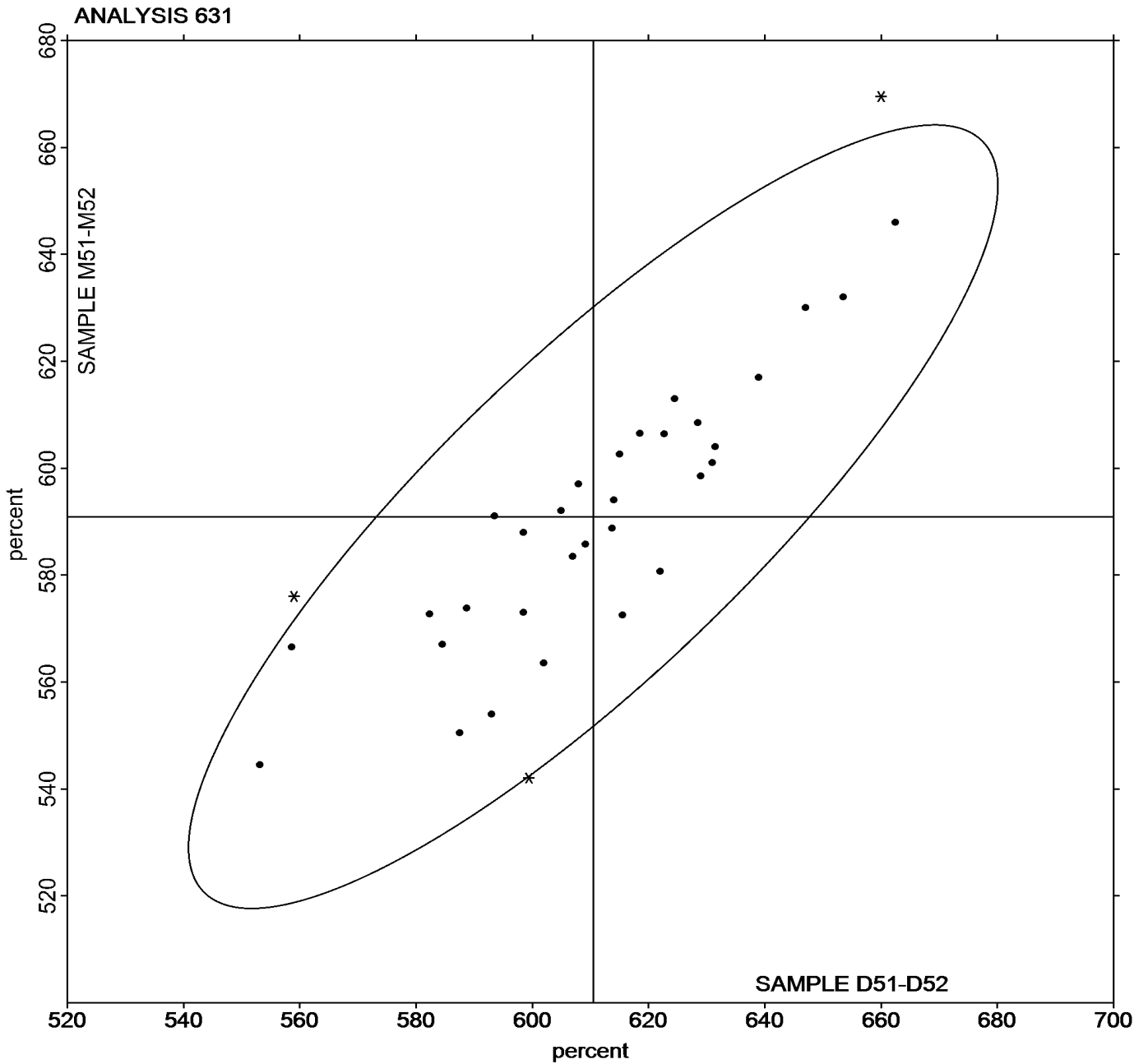
All samples : Polyisoprene compound, batch #1

Analysis 631

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

Grand Mean Sample M51 = 610.46 percent

Grand Mean Sample M52 = 590.93 percent



Analysis 632

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

WebCode	Data Flag	Sample M51			Sample M52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		903.5	-79.1	-1.00	1,011.5	-43.5	-0.35	ZZ
3BLR8G		960.5	-22.1	-0.28	1,032.5	-22.5	-0.18	ZZ
4TYQR6		1,029.0	46.4	0.59	1,021.0	-34.0	-0.27	ZZ
4WHLRC		970.3	-12.3	-0.16	1,079.1	24.1	0.19	ZZ
8YTXY4		921.5	-61.1	-0.77	1,019.5	-35.5	-0.29	ZZ
9UDMKY		998.6	16.0	0.20	1,018.2	-36.8	-0.30	ZZ
AZ2N4P		933.5	-49.1	-0.62	1,087.5	32.5	0.26	ZZ
B4HD3T		1,119.7	137.1	1.73	1,161.0	106.0	0.86	ZZ
CVGFTV		869.5	-113.1	-1.43	1,006.5	-48.5	-0.39	ZZ
DFY86W	*	808.0	-174.6	-2.21	764.0	-291.0	-2.35	ZZ
DGVMHT		987.0	4.4	0.06	1,085.5	30.5	0.25	ZZ
DZ7FMG		1,070.5	87.9	1.11	1,056.0	1.0	0.01	ZZ
E6VEDG		1,068.2	85.5	1.08	1,242.8	187.7	1.52	ZZ
E7TMHU		996.1	13.5	0.17	1,137.7	82.6	0.67	ZZ
EMF3LQ		1,100.7	118.1	1.49	1,237.2	182.1	1.47	ZZ
ENV8H4		981.7	-0.9	-0.01	1,024.0	-31.0	-0.25	ZZ
F8Y87U		981.8	-0.8	-0.01	1,160.0	104.9	0.85	ZZ
FD6ZZQ		897.5	-85.1	-1.08	916.5	-138.5	-1.12	ZZ
GMA9FP	*	1,074.5	91.9	1.16	864.5	-190.5	-1.54	ZZ
K43AKJ		1,010.9	28.3	0.36	854.0	-201.0	-1.62	ZZ
KJV4UP		855.7	-126.9	-1.61	906.5	-148.5	-1.20	ZZ
MTVEEJ		1,041.6	59.0	0.75	1,169.2	114.2	0.92	ZZ
QWKUGN		955.8	-26.8	-0.34	1,057.3	2.3	0.02	ZZ
TC899D		999.5	16.9	0.21	897.5	-157.5	-1.27	ZZ
UAFDM4		914.5	-68.1	-0.86	1,153.8	98.8	0.80	ZZ
UEA8J6		947.5	-35.1	-0.44	993.5	-61.5	-0.50	ZZ
UGGPH2		1,033.0	50.4	0.64	1,154.0	99.0	0.80	ZZ
W878X9		1,110.4	127.8	1.62	1,275.6	220.5	1.78	ZZ
W9ZX4M		979.8	-2.9	-0.04	1,055.2	0.2	0.00	ZZ
XNLZYG		1,084.2	101.6	1.28	1,305.4	250.3	2.02	ZZ
YM8TDZ		833.2	-149.4	-1.89	1,100.1	45.1	0.36	ZZ
YN3D3K		1,028.6	46.0	0.58	1,052.6	-2.4	-0.02	ZZ
YVY934		1,007.5	24.9	0.31	920.0	-135.0	-1.09	ZZ
ZDC8K8		934.5	-48.1	-0.61	1,051.0	-4.0	-0.03	ZZ

Analysis 632

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

Summary Statistics

Grand Means

982.61 psi

1,055.01 psi

Std Dev Btwn Labs

79.05 psi

123.70 psi

Statistics based on 34 of 34 reporting participants

Summary Statistics in SI Units

Grand Means

6.7748 MPa

7.27 MPa

Std Dev Btwn Labs

0.5450 MPa

0.85 MPa

Statistics based on 34 of 34 reporting participants

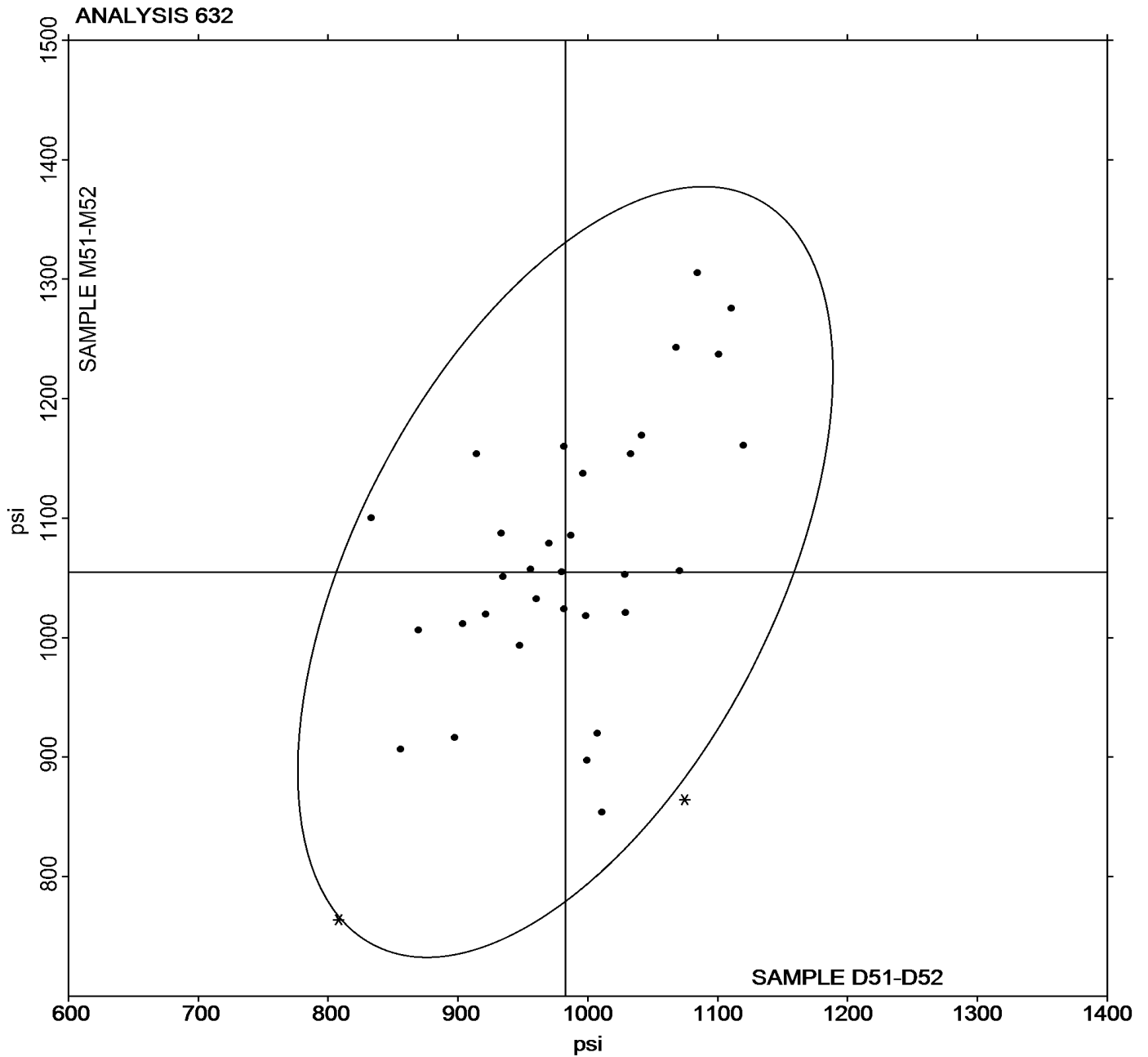
All samples : Polyisoprene compound, batch #1

Analysis 632

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

Grand Mean Sample M51 = 982.61 psi

Grand Mean Sample M52 = 1,055.01 psi



Analysis 633

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

WebCode	Data Flag	Sample M51			Sample M52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		203.5	-7.7	-0.46	226.0	-4.0	-0.16	ZZ
3BLR8G		201.5	-9.7	-0.57	215.5	-14.5	-0.58	ZZ
4TYQR6		224.0	12.8	0.76	232.0	2.0	0.08	ZZ
4WHLRC		207.4	-3.8	-0.22	242.9	13.0	0.52	ZZ
8YTXY4		206.5	-4.7	-0.28	233.0	3.0	0.12	ZZ
9UDMKY		208.1	-3.0	-0.18	217.6	-12.4	-0.50	ZZ
AZ2N4P		203.0	-8.2	-0.49	237.0	7.0	0.28	ZZ
B4HD3T		250.2	39.0	2.32	240.8	10.8	0.43	ZZ
CVGFTV		189.0	-22.2	-1.32	217.0	-13.0	-0.52	ZZ
DFY86W		189.0	-22.2	-1.32	184.5	-45.5	-1.82	ZZ
DGVMHT		209.5	-1.7	-0.10	232.0	2.0	0.08	ZZ
DZ7FMG		211.0	-0.2	-0.01	222.0	-8.0	-0.32	ZZ
E6VEDG		227.5	16.3	0.97	275.2	45.2	1.81	ZZ
E7TMHU		219.9	8.7	0.52	247.1	17.1	0.69	ZZ
EMF3LQ		227.4	16.2	0.96	267.7	37.7	1.51	ZZ
ENV8H4		202.5	-8.7	-0.51	211.7	-18.3	-0.73	ZZ
F8Y87U		210.1	-1.1	-0.06	250.4	20.4	0.82	ZZ
FD6ZZQ		197.5	-13.7	-0.81	202.5	-27.5	-1.10	ZZ
GMA9FP	*	222.5	11.3	0.67	177.0	-53.0	-2.12	ZZ
K43AKJ		235.3	24.1	1.43	204.6	-25.4	-1.02	ZZ
KJV4UP		188.6	-22.6	-1.34	195.8	-34.2	-1.37	ZZ
MTVEEJ		201.9	-9.2	-0.55	231.1	1.2	0.05	ZZ
QWKUGN		210.3	-0.9	-0.05	244.4	14.4	0.58	ZZ
TC899D		214.0	2.8	0.17	194.5	-35.5	-1.42	ZZ
UAFDM4		188.6	-22.6	-1.34	242.2	12.2	0.49	ZZ
UEA8J6		190.5	-20.7	-1.23	209.5	-20.5	-0.82	ZZ
UGGPH2		230.0	18.8	1.12	253.0	23.0	0.92	ZZ
W878X9		235.8	24.6	1.46	281.6	51.6	2.07	ZZ
W9ZX4M		205.6	-5.6	-0.33	222.8	-7.2	-0.29	ZZ
XNLZYG		224.1	12.9	0.77	265.4	35.4	1.42	ZZ
YM8TDZ		179.1	-32.0	-1.90	242.2	12.2	0.49	ZZ
YN3D3K		231.6	20.4	1.21	257.4	27.4	1.10	ZZ
YVY934		235.0	23.8	1.41	214.0	-16.0	-0.64	ZZ
ZDC8K8		199.5	-11.7	-0.69	229.0	-1.0	-0.04	ZZ

**Rubber Interlaboratory Testing Program
Analysis 633****Stress at 100% Elongation: Precured vs. Lab-Cured Samples (psi)**

Summary Statistics

Grand Means

211.17 psi

229.98 psi

Std Dev Btwn Labs

16.85 psi

24.99 psi

Statistics based on 34 of 34 reporting participants

Summary Statistics in SI Units

Grand Means

1.4560 MPa

1.59 MPa

Std Dev Btwn Labs

0.1161 MPa

0.17 MPa

Statistics based on 34 of 34 reporting participants

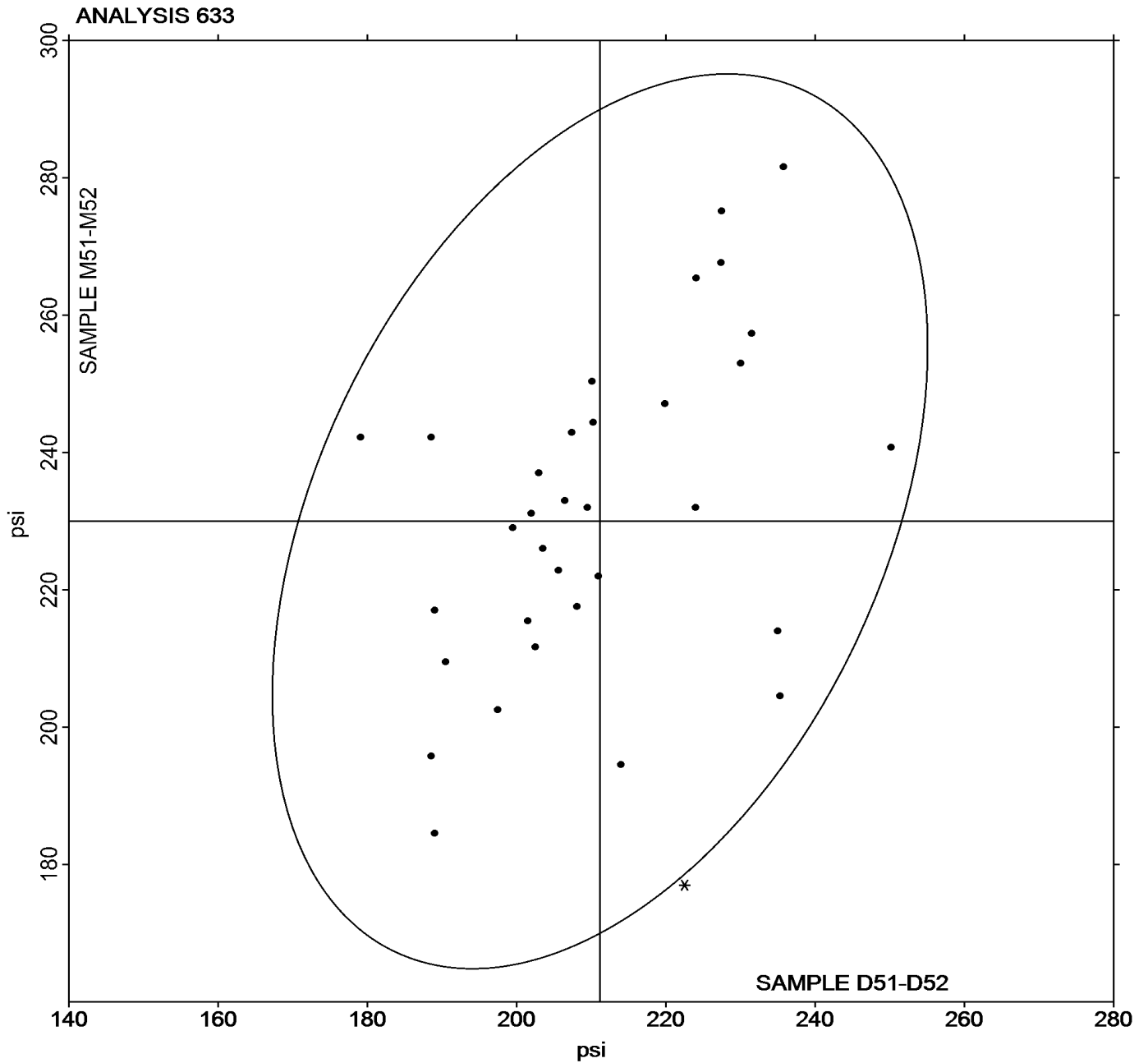
All samples : Polyisoprene compound, batch #1

Analysis 633

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

Grand Mean Sample M51 = 211.17 psi

Grand Mean Sample M52 = 229.98 psi



Rubber Interlaboratory Testing Program

Analysis 660

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

WebCode	Data Flag	Sample V51			Sample V52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		48.63	0.22	0.21	55.85	0.12	0.12	MR
3BLR8G		48.52	0.11	0.10	55.92	0.19	0.19	MR
3GCX4R		46.30	-2.11	-2.07	54.70	-1.03	-1.02	MR
4TYQR6		48.72	0.31	0.31	56.64	0.92	0.91	TV
4WHLRC		49.10	0.69	0.68	56.23	0.51	0.50	MR
79KTKE		48.38	-0.03	-0.03	56.10	0.37	0.37	MR
8YTXY4		48.40	-0.01	-0.01	55.72	-0.01	-0.01	MR
92EYGW		47.80	-0.61	-0.60	55.50	-0.23	-0.23	MR
9CYBT9		48.94	0.53	0.52	56.67	0.94	0.93	MP
9UDMKY		47.62	-0.79	-0.78	55.38	-0.34	-0.34	MR
APJ8BH		48.07	-0.34	-0.33	55.79	0.06	0.06	MR
AZ2N4P		48.15	-0.26	-0.25	55.28	-0.44	-0.44	MR
B4HD3T		48.83	0.42	0.41	56.48	0.76	0.75	MR
DGVMHT		48.63	0.22	0.22	55.30	-0.43	-0.42	MR
E6VEDG		48.58	0.17	0.17	55.52	-0.21	-0.21	XX
E7TMHU		49.32	0.91	0.89	56.55	0.82	0.82	MR
EM2GCP		47.78	-0.63	-0.61	55.82	0.09	0.09	MR
F8Y87U		47.34	-1.07	-1.04	54.04	-1.69	-1.68	TV
GLEPDN		48.68	0.27	0.27	55.40	-0.33	-0.33	MR
GPGQDL		47.38	-1.03	-1.01	55.33	-0.40	-0.40	MR
HDJA2P		48.32	-0.09	-0.09	56.88	1.16	1.15	MR
HM9XYD		48.35	-0.06	-0.06	55.52	-0.21	-0.21	MR
K43AKJ		50.16	1.75	1.72	56.73	1.00	1.00	TV
KJV4UP		48.55	0.14	0.14	54.73	-0.99	-0.99	MR
LJEBUE		50.13	1.72	1.69	57.82	2.09	2.08	MR
N3F6CV		49.27	0.86	0.84	56.33	0.61	0.60	MR
PT63QV		46.45	-1.96	-1.92	53.58	-2.14	-2.13	MR
QWKUGN		49.52	1.11	1.08	57.12	1.39	1.38	MR
R7J8QM		45.99	-2.42	-2.37	53.30	-2.43	-2.41	XX
UAFDM4		48.62	0.21	0.21	54.74	-0.99	-0.98	MR
UEA8J6		48.62	0.21	0.20	55.77	0.04	0.04	MR
VH7F2K		50.28	1.87	1.83	57.23	1.51	1.50	MR
W878X9		48.23	-0.18	-0.17	55.77	0.04	0.04	MR
XNLZYG		46.68	-1.73	-1.69	54.30	-1.43	-1.42	XX
YN3D3K		48.65	0.24	0.24	55.31	-0.42	-0.42	MR
ZB9ETU		49.75	1.34	1.31	56.85	1.12	1.12	MR

Analysis 660

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

		Summary Statistics	
Grand Means	48.410 ML 1 + 4	55.727 ML 1 + 4	
Stnd Dev Btwn Labs	1.021 ML 1 + 4	1.007 ML 1 + 4	
Statistics based on 36 of 36 reporting participants			

Samples V51-V52: SBR & V53-V54: Butyl

Instrument Code Listing

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

Instruments:

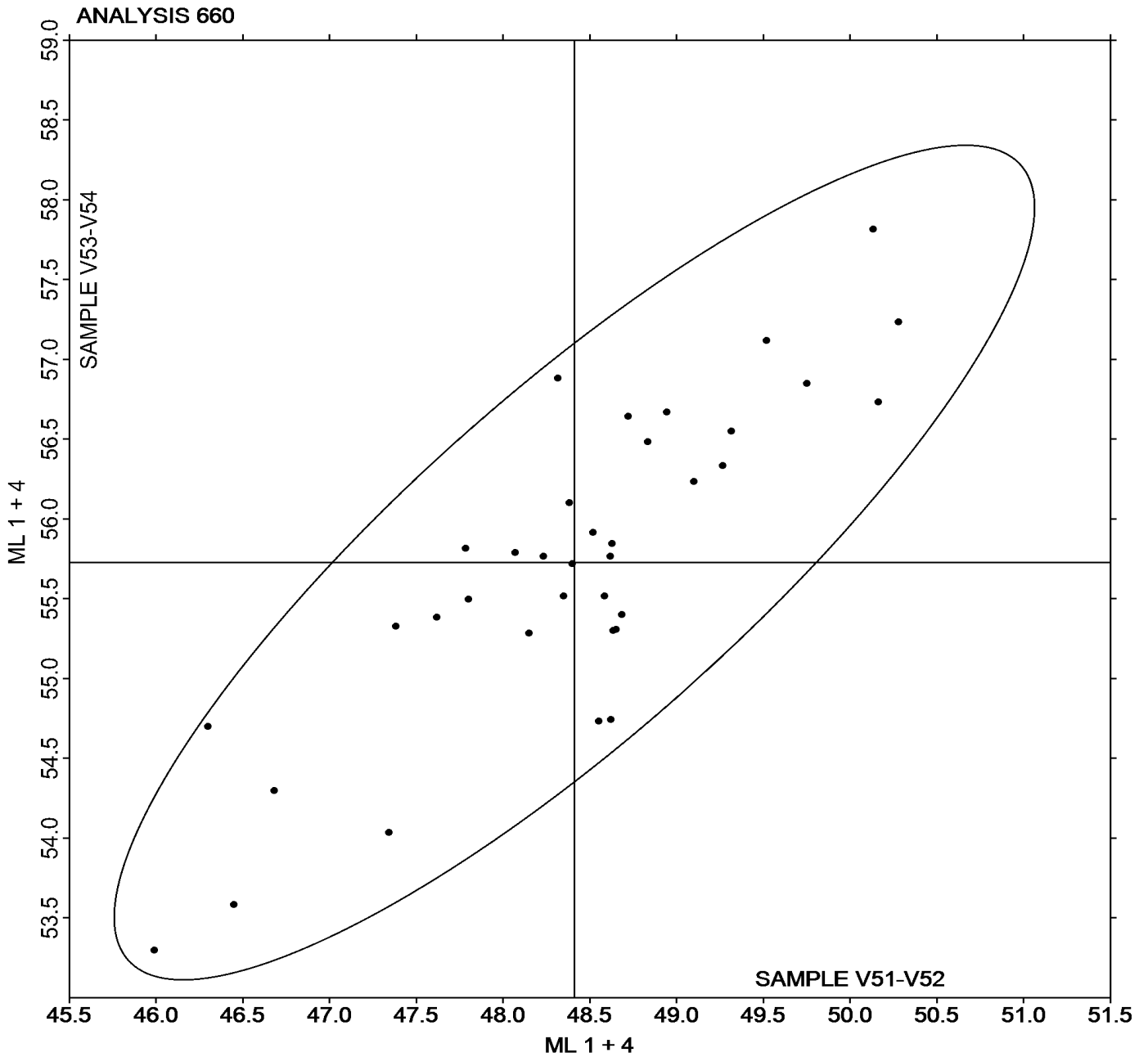
- | | |
|--|---|
| (ML) Alpha Technologies/Monsanto model not specified | (MM) Alpha Technologies Model 1xxx or OSM |
| (MP) Monsanto Compact Mooney Viscometer | (MR) Alpha Technologies Model MV2000/MV2000E |
| (MZ) Rebuilt Monsanto Mooney Viscometer | (SF) Scott STI (any model) |
| (TV) Tech Pro Visc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

Analysis 660

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

Grand Mean Sample V51 = 48.410 ML 1 + 4

Grand Mean Sample V52 = 55.727 ML 1 + 4



Analysis 661

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

WebCode	Data Flag	Sample			Sample			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		48.63	0.18	0.19	53.57	0.20	0.21	MR
3BLR8G		48.52	0.07	0.08	54.15	0.78	0.81	MP
3GCX4R		46.30	-2.14	-2.29	52.32	-1.05	-1.09	MR
4TYQR6		48.72	0.28	0.30	54.36	0.99	1.02	XX
4WHLRC		49.10	0.66	0.70	53.03	-0.34	-0.35	MR
79KTKE		48.38	-0.06	-0.07	53.52	0.15	0.15	MR
8YTXY4		48.40	-0.04	-0.05	54.22	0.85	0.88	MR
92EYGW		47.80	-0.64	-0.69	53.80	0.43	0.44	MR
9CYBT9		48.94	0.50	0.53	53.50	0.13	0.14	MP
9UDMKY		47.62	-0.83	-0.88	53.10	-0.27	-0.28	MR
APJ8BH		48.07	-0.37	-0.40	53.28	-0.09	-0.09	XX
AZ2N4P		48.15	-0.29	-0.31	52.60	-0.77	-0.80	XX
B4HD3T		48.83	0.39	0.42	54.52	1.15	1.19	MR
DGVMHT		48.63	0.19	0.20	53.07	-0.30	-0.31	MR
E6VEDG		48.58	0.14	0.15	54.05	0.68	0.70	XX
E7TMHU		49.32	0.87	0.93	54.02	0.65	0.67	MR
F8Y87U	*	47.34	-1.10	-1.18	50.82	-2.55	-2.64	TV
GLEPDN		48.68	0.24	0.25	52.95	-0.42	-0.43	MR
GPGQDL		47.38	-1.06	-1.14	53.21	-0.16	-0.16	MR
HDJA2P		48.32	-0.13	-0.14	54.63	1.26	1.31	MR
HM9XYD		48.35	-0.09	-0.10	53.10	-0.27	-0.28	MR
K43AKJ		50.16	1.72	1.84	54.08	0.71	0.73	TV
KJV4UP		48.55	0.11	0.11	51.78	-1.59	-1.64	MR
N3F6CV		49.27	0.82	0.88	53.53	0.16	0.17	MR
PT63QV		46.45	-1.99	-2.13	51.57	-1.80	-1.86	MR
QWKUGN		49.52	1.07	1.14	54.45	1.08	1.12	MR
UAFDM4	X	48.62	0.18	0.19	44.43	-8.94	-9.24	MR
UEA8J6		48.62	0.17	0.18	53.40	0.03	0.03	MR
VH7F2K		50.28	1.84	1.96	54.74	1.37	1.42	MR
W878X9		48.23	-0.21	-0.23	53.35	-0.02	-0.02	MR
XNLZYG		46.68	-1.76	-1.88	51.74	-1.63	-1.69	XX
YN3D3K		48.65	0.21	0.22	52.78	-0.59	-0.61	MR
ZB9ETU		49.75	1.31	1.39	54.60	1.23	1.27	MR

Analysis 661

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

		Summary Statistics	
Grand Means	48.445 ML 1 + 8	53.369 ML 1 + 8	
Stnd Dev Btwn Labs	0.936 ML 1 + 8	0.968 ML 1 + 8	
Statistics based on 32 of 33 reporting participants			

Please refer to the sample information provided for Analysis 660.

Comments on assigned Data Flags for Test #661

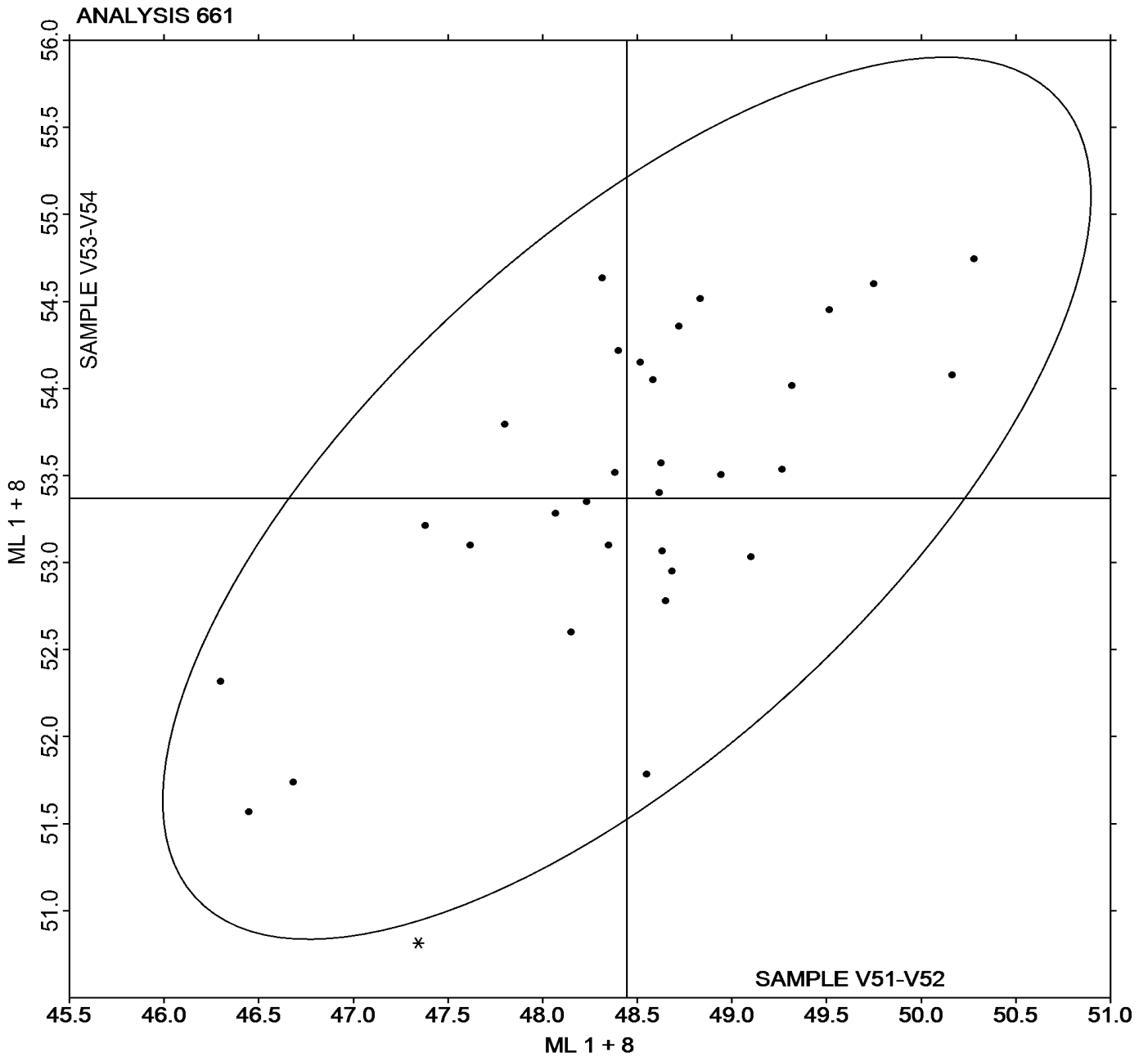
UAFDM4 (X) - Extreme data for Sample group V53-V54.

Analysis 661

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

Grand Mean Sample = 48.445 ML 1 + 8

Grand Mean Sample = 53.369 ML 1 + 8



Analysis 662

Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample V51			Sample V52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		12.10	0.89	0.33	7.558	-0.630	-0.44	MR
4TYQR6		5.19	-6.02	-2.22	5.158	-3.030	-2.11	XX
79KTKE		11.23	0.03	0.01	8.367	0.178	0.12	MR
9UDMKY		13.08	1.87	0.69	9.360	1.171	0.82	MR
AZ2N4P		11.77	0.56	0.21	8.413	0.225	0.16	MR
B4HD3T		13.53	2.33	0.86	9.357	1.168	0.81	MR
DGVMHT		10.31	-0.89	-0.33	7.833	-0.355	-0.25	MR
EM2GCP		12.10	0.89	0.33	9.600	1.411	0.98	MR
HM9XYD		12.31	1.11	0.41	8.167	-0.022	-0.02	MR
K43AKJ	X	1,368.60	1,357.39	501.30	731.500	723.311	503.41	TV
KJV4UP		13.98	2.78	1.03	9.733	1.545	1.08	XX
QWKUGN		12.21	1.00	0.37	8.892	0.703	0.49	MR
UAFDM4	M	No data reported for this sample			8.150	-0.039	-0.03	XX
UEA8J6		12.16	0.96	0.35	8.543	0.355	0.25	MR
W878X9		11.74	0.53	0.20	8.507	0.318	0.22	MR
XNLZYG		5.18	-6.03	-2.23	5.153	-3.035	-2.11	XX

Summary Statistics

Grand Means

11.208 seconds

8.1887 seconds

Std Dev Btwn Labs

2.708 seconds

1.4368 seconds

Statistics based on 14 of 16 reporting participants

Samples V51-V52: SBR & V53-V54: Butyl

Comments on assigned Data Flags for Test #662

K43AKJ (X) - Extreme data.

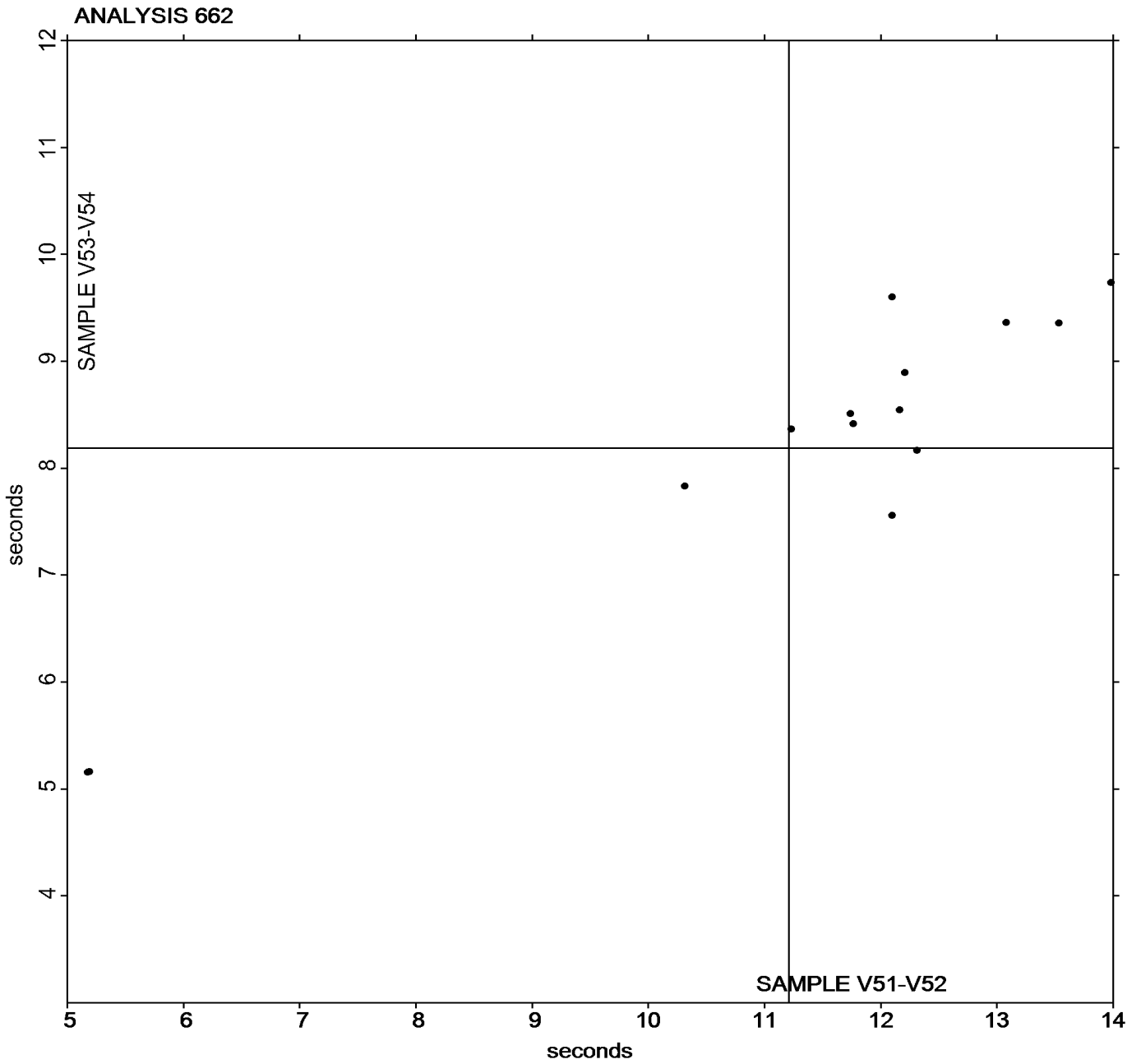
UAFDM4 (M) - Data not reported for Sample group V51-V52.

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

Grand Mean Sample V51 = 11.208 seconds

Grand Mean Sample V52 = 8.1887 seconds



Analysis 663

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample V51			Sample V52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		85.79	0.10	0.10	91.80	1.21	1.51	MR
4TYQR6		86.35	0.67	0.63	90.33	-0.27	-0.34	XX
79KTKE		86.35	0.67	0.63	91.12	0.52	0.65	MR
9UDMKY		85.34	-0.35	-0.32	90.46	-0.14	-0.17	MR
AZ2N4P		86.17	0.49	0.46	91.02	0.43	0.54	MR
B4HD3T		85.15	-0.53	-0.50	90.03	-0.56	-0.70	MR
DGVMHT		86.98	1.30	1.21	91.59	0.99	1.24	MR
HM9XYD		85.69	0.00	0.00	91.23	0.63	0.79	MR
K43AKJ		82.66	-3.02	-2.82	88.81	-1.78	-2.23	TV
KJV4UP		84.68	-1.00	-0.93	89.58	-1.01	-1.26	XX
QWKUGN		85.64	-0.04	-0.04	90.16	-0.43	-0.54	MR
UAFDM4	M	No data reported for this sample			91.04	0.45	0.56	XX
UEA8J6		85.77	0.09	0.08	90.83	0.23	0.29	MR
W878X9		86.15	0.46	0.43	90.97	0.38	0.47	MR
XNLZYG		86.83	1.15	1.07	90.40	-0.20	-0.25	XX

Summary Statistics

Grand Means

85.681 percent

90.594 percent

Std Dev Btwn Labs

1.070 percent

0.800 percent

Statistics based on 14 of 15 reporting participants

Samples V51-V52: SBR & V53-V54: Butyl

UAFDM4 (M) - Data not reported for Sample group V51-V52. Data appear to be reported as percent decay and not X30. Data corrected by CTS.

Analysis Notes:

4TYQR6 - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

AZ2N4P - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

B4HD3T - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

DGVMHT - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

HM9XYD - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

KJV4UP - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

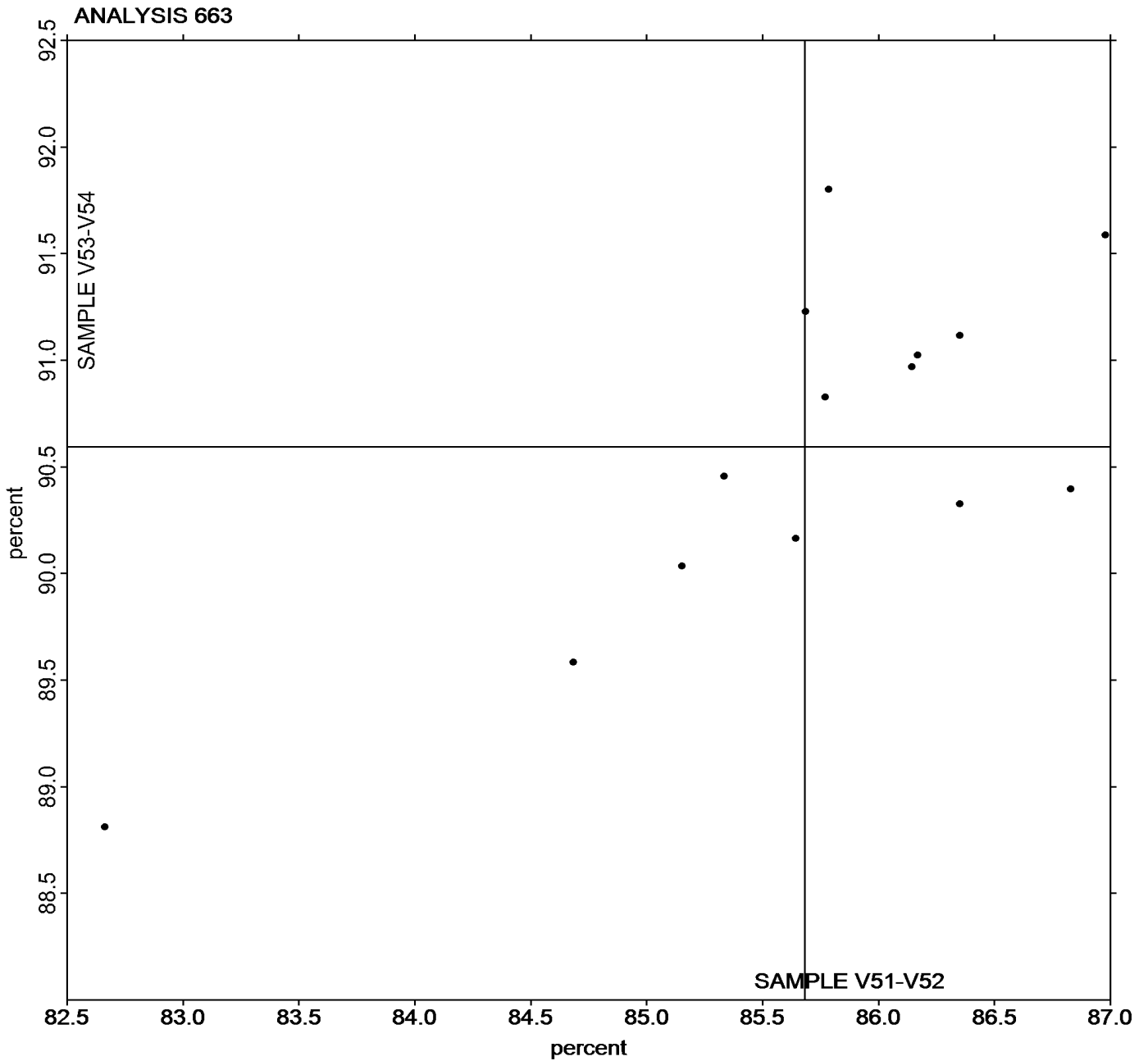
UEA8J6 - Data appear to be reported as percent decay and not X30. Data corrected by CTS.

Analysis 663

Mooney Stress Relaxation: X30 (percent)

Grand Mean Sample V51 = 85.681 percent

Grand Mean Sample V52 = 90.594 percent



Analysis 664

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

WebCode	Data Flag	Sample V51			Sample V52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		746.1	17.2	0.37	496.9	-64.3	-1.33	MR
4TYQR6		717.4	-11.5	-0.25	601.0	39.9	0.83	XX
79KTKE		712.5	-16.4	-0.36	527.0	-34.1	-0.71	MR
9UDMKY		757.0	28.1	0.61	567.2	6.0	0.13	XX
AZ2N4P		716.2	-12.7	-0.28	526.8	-34.3	-0.71	MR
B4HD3T		782.5	53.6	1.16	602.9	41.8	0.87	MR
DGVMHT		680.4	-48.6	-1.05	495.8	-65.4	-1.36	MR
HM9XYD		745.6	16.7	0.36	518.3	-42.8	-0.89	MR
K43AKJ		642.7	-86.2	-1.87	645.0	83.9	1.74	TV
KJV4UP		806.1	77.2	1.67	633.2	72.1	1.50	XX
QWKUGN		767.4	38.5	0.83	595.6	34.4	0.72	MR
UAFDM4	M	No data reported for this sample			324.8	-236.4	-4.91	XX
UEA8J6		751.7	22.7	0.49	547.3	-13.8	-0.29	MR
W878X9		722.1	-6.8	-0.15	536.7	-24.5	-0.51	MR
XNLZYG		657.2	-71.7	-1.55	562.1	1.0	0.02	XX

Summary Statistics

Grand Means

728.92 M-s

561.13 M-s

Std Dev Btwn Labs

46.20 M-s

48.17 M-s

Statistics based on 14 of 15 reporting participants

Samples V51-V52: SBR & V53-V54: Butyl

Comments on assigned Data Flags for Test #664

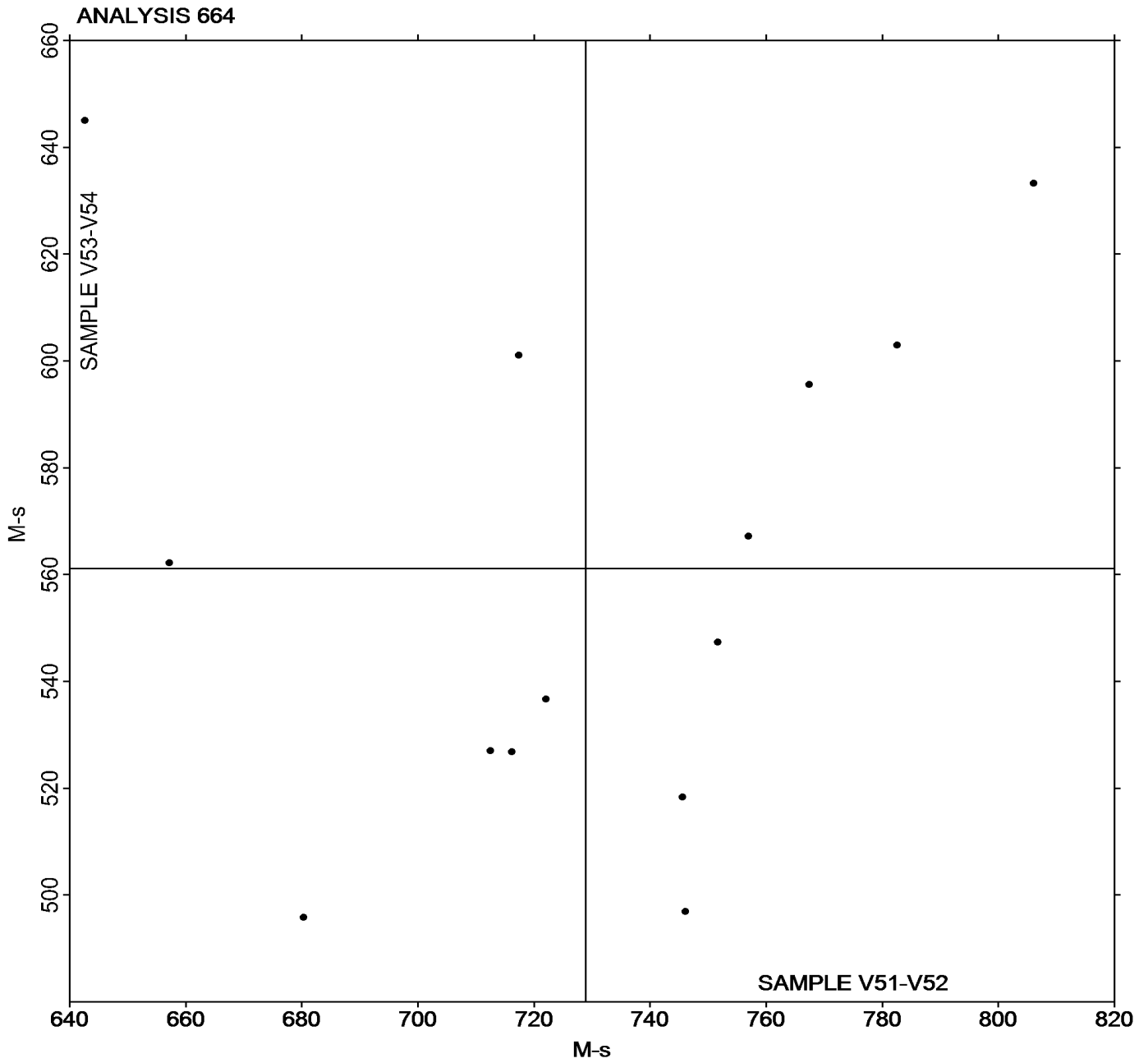
UAFDM4 (M) - Data not reported for Sample group V51-V52.

Analysis 664

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

Grand Mean Sample V51 = 728.92 M-s

Grand Mean Sample V52 = 561.13 M-s



Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		0.9317	-0.0635	-0.82	1.467	-0.060	-0.63	ZZ
3BLR8G		0.9917	-0.0035	-0.04	1.395	-0.131	-1.38	ZZ
4WHLRC		1.1067	0.1115	1.44	1.660	0.134	1.40	ZZ
8YTXY4		0.9100	-0.0851	-1.10	1.500	-0.026	-0.28	ZZ
92EYGW		0.9583	-0.0368	-0.48	1.500	-0.026	-0.28	ZZ
9CYBT9		0.9500	-0.0451	-0.58	1.477	-0.050	-0.52	ZZ
APJ8BH		0.9167	-0.0785	-1.01	1.447	-0.080	-0.84	ZZ
ENV8H4		0.8817	-0.1135	-1.47	1.488	-0.038	-0.40	ZZ
GPGQDL		0.9650	-0.0301	-0.39	1.477	-0.050	-0.52	ZZ
HDJA2P		1.0450	0.0499	0.64	1.565	0.039	0.41	ZZ
K43AKJ		1.0767	0.0815	1.05	1.540	0.014	0.14	ZZ
KJJ8PK		1.0233	0.0282	0.36	1.653	0.127	1.33	ZZ
KJV4UP		1.0433	0.0482	0.62	1.467	-0.060	-0.63	ZZ
PT63QV		1.1317	0.1365	1.76	1.735	0.209	2.19	ZZ

Summary Statistics

Grand Means

0.99512 minutes

1.5264 minutes

Std Dev Btwn Labs

0.07744 minutes

0.0952 minutes

Statistics based on 14 of 14 reporting participants

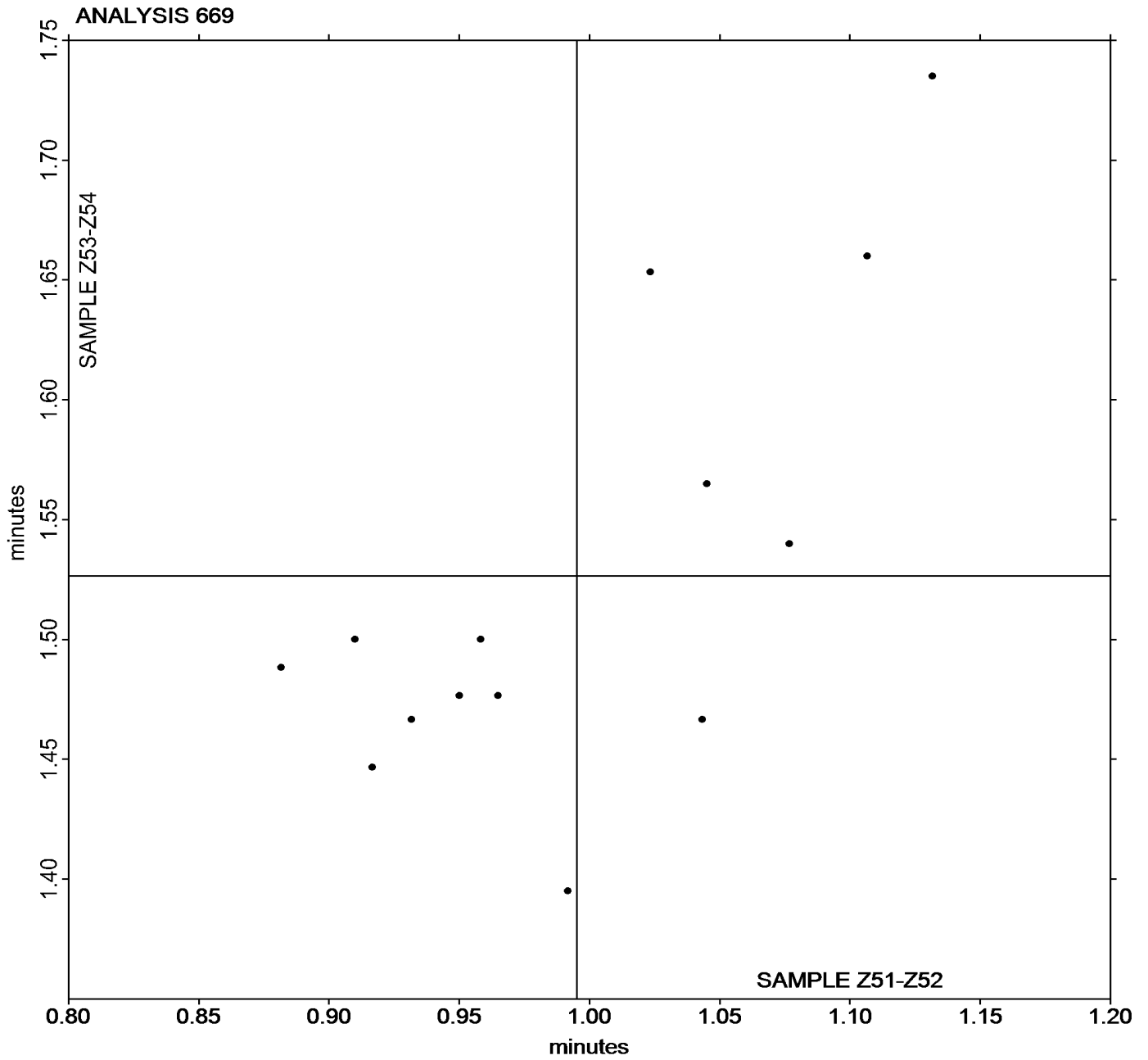
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample Z51 = 0.99512 minutes

Grand Mean Sample Z52 = 1.5264 minutes



Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		0.6517	-0.0325	-0.51	0.995	-0.029	-0.42	ZZ
3BLR8G		0.6833	-0.0008	-0.01	0.953	-0.070	-1.03	ZZ
4WHLRC		0.7700	0.0858	1.35	1.108	0.085	1.24	ZZ
8YTXY4		0.6267	-0.0575	-0.90	1.030	0.006	0.09	ZZ
92EYGW		0.6433	-0.0408	-0.64	0.983	-0.040	-0.59	ZZ
9CYBT9		0.6633	-0.0208	-0.33	1.005	-0.019	-0.27	ZZ
APJ8BH		0.6217	-0.0625	-0.98	0.950	-0.074	-1.08	ZZ
ENV8H4		0.6000	-0.0842	-1.32	0.978	-0.045	-0.67	ZZ
GPGQDL		0.6567	-0.0275	-0.43	0.972	-0.052	-0.76	ZZ
HDJA2P		0.7100	0.0258	0.41	1.053	0.030	0.44	ZZ
K43AKJ		0.7783	0.0942	1.48	1.063	0.040	0.58	ZZ
KJJ8PK		0.6900	0.0058	0.09	1.067	0.043	0.63	ZZ
KJV4UP		0.6683	-0.0158	-0.25	0.980	-0.044	-0.64	ZZ
PT63QV		0.8150	0.1308	2.06	1.193	0.170	2.49	ZZ

Summary Statistics

Grand Means

0.68417 minutes

1.0237 minutes

Std Dev Btwn Labs

0.06356 minutes

0.0680 minutes

Statistics based on 14 of 14 reporting participants

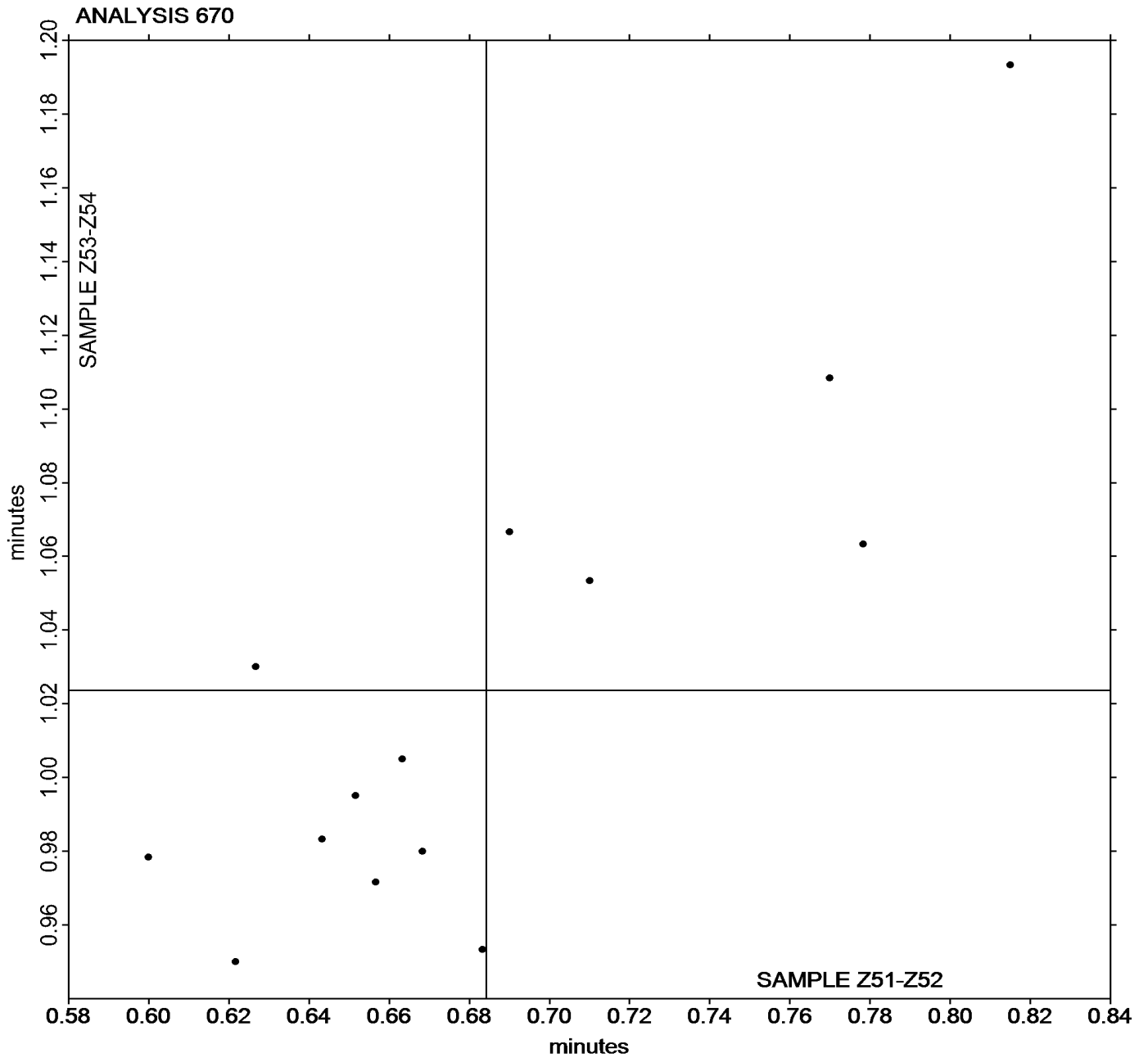
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample Z51 = 0.68417 minutes

Grand Mean Sample Z52 = 1.0237 minutes



Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		2.303	-0.280	-1.40	3.595	-0.058	-0.34	ZZ
3BLR8G		2.760	0.177	0.88	3.737	0.084	0.50	ZZ
4WHLRC		2.867	0.283	1.42	3.775	0.123	0.72	ZZ
8YTXY4		2.472	-0.112	-0.56	3.535	-0.118	-0.70	ZZ
92EYGW		2.608	0.025	0.12	3.553	-0.099	-0.59	ZZ
9CYBT9		2.397	-0.187	-0.93	3.325	-0.328	-1.94	ZZ
APJ8BH		2.485	-0.098	-0.49	3.473	-0.179	-1.06	ZZ
ENV8H4		2.217	-0.367	-1.84	3.640	-0.013	-0.07	ZZ
GPGQDL		2.452	-0.132	-0.66	3.488	-0.164	-0.97	ZZ
HDJA2P		2.640	0.057	0.28	3.667	0.014	0.08	ZZ
K43AKJ		2.700	0.117	0.58	3.738	0.086	0.51	ZZ
KJJ8PK		2.692	0.108	0.54	3.903	0.251	1.48	ZZ
KJV4UP		2.728	0.145	0.73	3.800	0.148	0.87	ZZ
PT63QV		2.848	0.265	1.33	3.905	0.253	1.49	ZZ

Summary Statistics

Grand Means

2.5835 minutes

3.6525 minutes

Std Dev Btwn Labs

0.1998 minutes

0.1690 minutes

Statistics based on 14 of 14 reporting participants

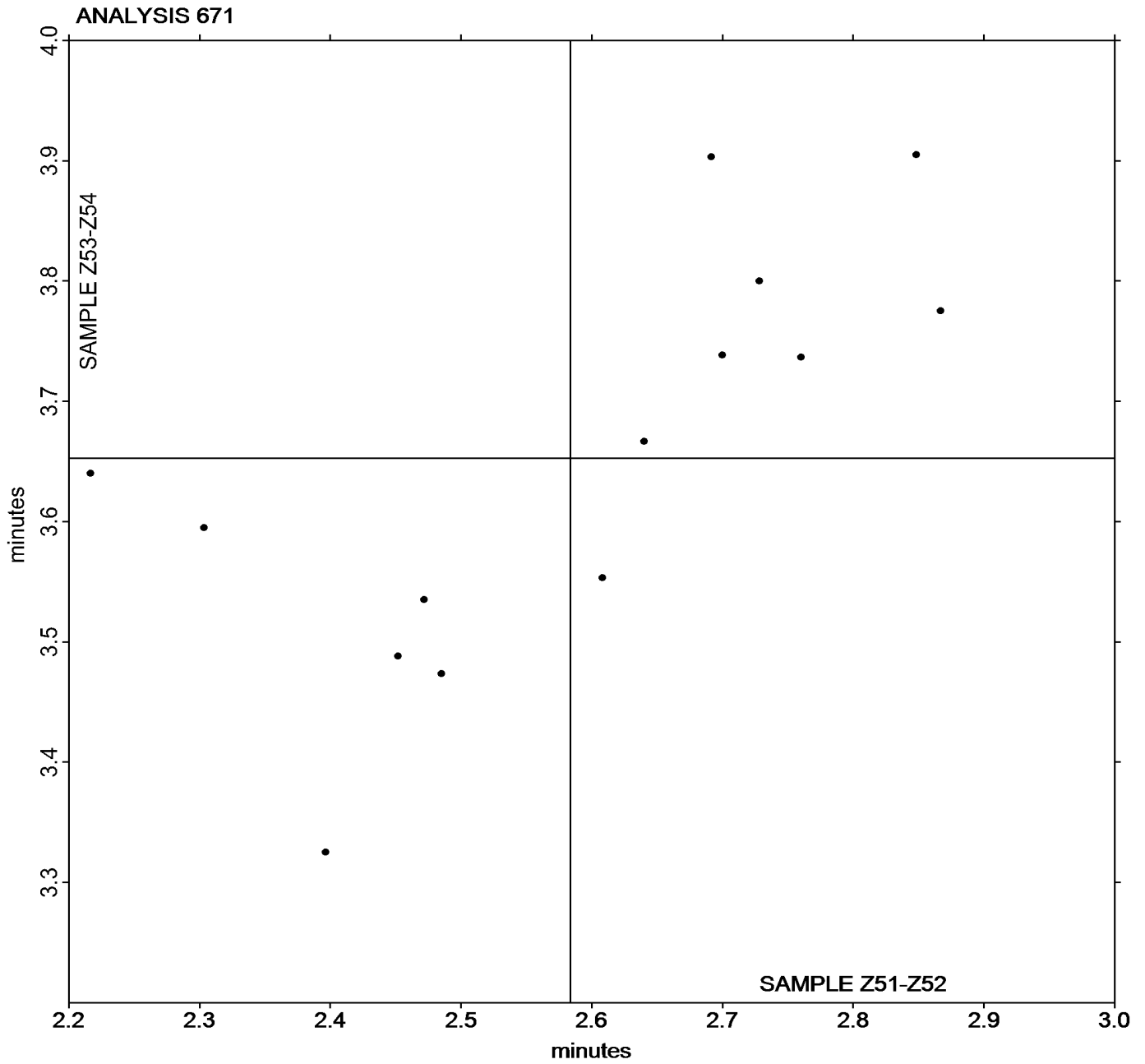
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample Z51 = 2.5835 minutes

Grand Mean Sample Z52 = 3.6525 minutes



Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		10.56	-2.37	-1.84	9.073	0.370	0.41	ZZ
3BLR8G		14.04	1.11	0.86	9.592	0.889	0.98	ZZ
4WHLRC		14.34	1.42	1.10	7.523	-1.180	-1.31	ZZ
8YTXY4		14.41	1.49	1.15	10.277	1.574	1.74	ZZ
92EYGW		14.87	1.94	1.51	8.888	0.185	0.21	ZZ
9CYBT9		11.36	-1.56	-1.21	7.695	-1.008	-1.12	ZZ
APJ8BH		12.74	-0.18	-0.14	8.212	-0.491	-0.54	ZZ
ENV8H4		11.37	-1.55	-1.21	7.887	-0.816	-0.90	ZZ
GPGQDL		12.47	-0.45	-0.35	7.842	-0.861	-0.95	ZZ
HDJA2P		12.34	-0.58	-0.45	8.205	-0.498	-0.55	ZZ
K43AKJ		12.53	-0.39	-0.31	9.853	1.150	1.27	ZZ
KJJ8PK		12.62	-0.30	-0.24	8.230	-0.473	-0.52	ZZ
KJV4UP		13.78	0.86	0.67	9.850	1.147	1.27	ZZ
PT63QV		13.50	0.58	0.45	8.717	0.014	0.02	ZZ

Summary Statistics

Grand Means

12.924 minutes

8.7031 minutes

Std Dev Btwn Labs

1.288 minutes

0.9032 minutes

Statistics based on 14 of 14 reporting participants

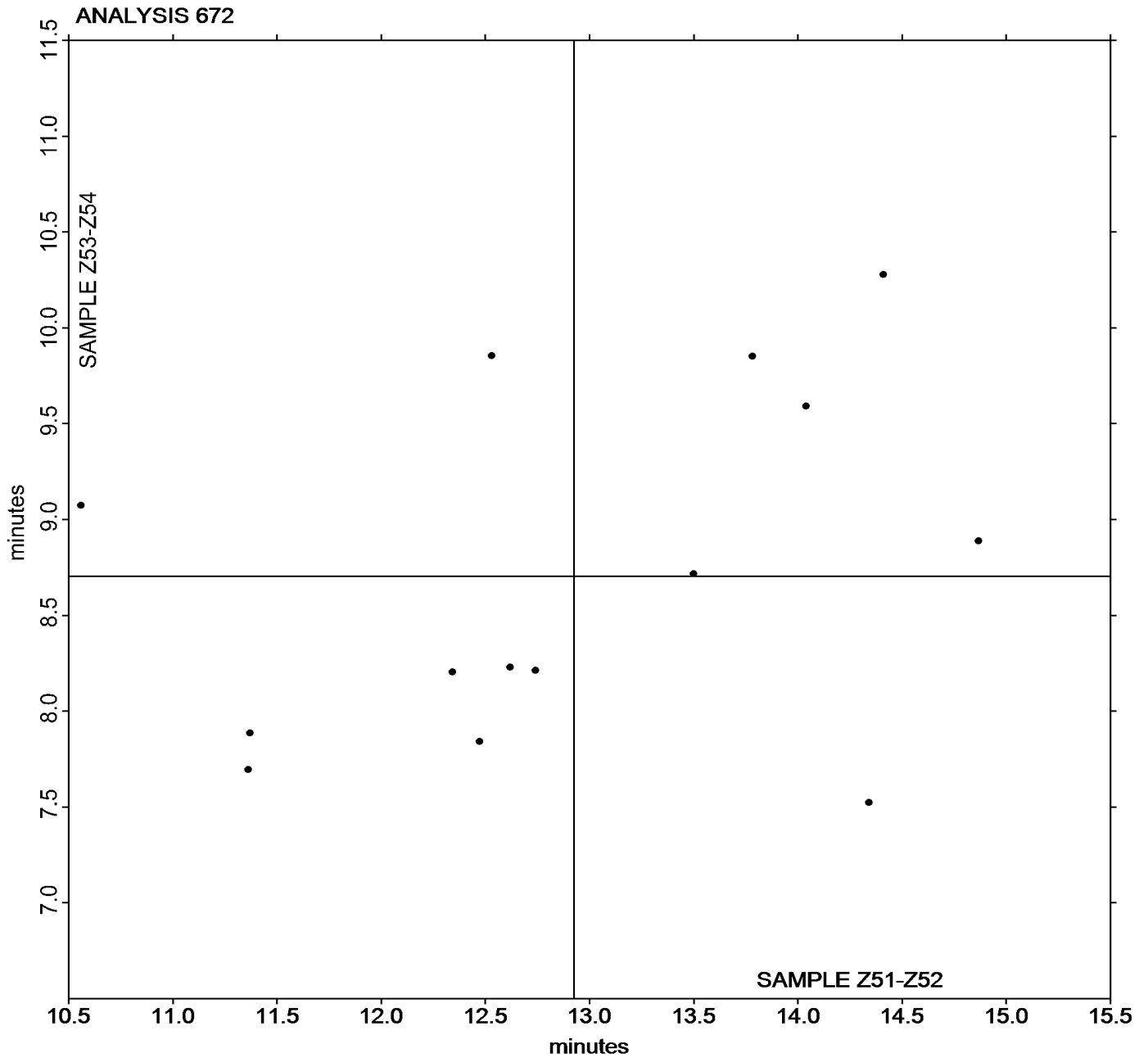
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample Z51 = 12.924 minutes

Grand Mean Sample Z52 = 8.7031 minutes



Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		11.56	-0.43	-0.50	9.055	-0.290	-0.23	ZZ
3BLR8G		13.72	1.74	2.00	12.910	3.565	2.83	ZZ
4WHLRC		11.57	-0.42	-0.48	8.477	-0.868	-0.69	ZZ
8YTXY4		11.24	-0.75	-0.86	8.353	-0.991	-0.79	ZZ
92EYGW		12.80	0.82	0.94	9.730	0.385	0.31	ZZ
9CYBT9		12.76	0.77	0.89	9.192	-0.153	-0.12	ZZ
APJ8BH		11.35	-0.64	-0.74	8.830	-0.515	-0.41	ZZ
ENV8H4		12.00	0.01	0.01	9.160	-0.185	-0.15	ZZ
GPGQDL		10.29	-1.70	-1.96	8.007	-1.338	-1.06	ZZ
HDJA2P		11.31	-0.68	-0.79	8.453	-0.891	-0.71	ZZ
K43AKJ		12.67	0.68	0.78	10.718	1.374	1.09	ZZ
KJJ8PK		12.53	0.54	0.62	8.807	-0.538	-0.43	ZZ
KJV4UP		12.18	0.20	0.23	10.183	0.839	0.67	ZZ
PT63QV		11.86	-0.13	-0.15	8.948	-0.396	-0.31	ZZ

Summary Statistics

Grand Means

11.987 lbf.in

9.3445 lbf.in

Std Dev Btwn Labs

0.867 lbf.in

1.2596 lbf.in

Statistics based on 14 of 14 reporting participants

Summary Statistics in SI Units

Grand Means

13.544 dN.m

10.5579 dN.m

Std Dev Btwn Labs

0.979 dN.m

1.4231 dN.m

Statistics based on 14 of 14 reporting participants

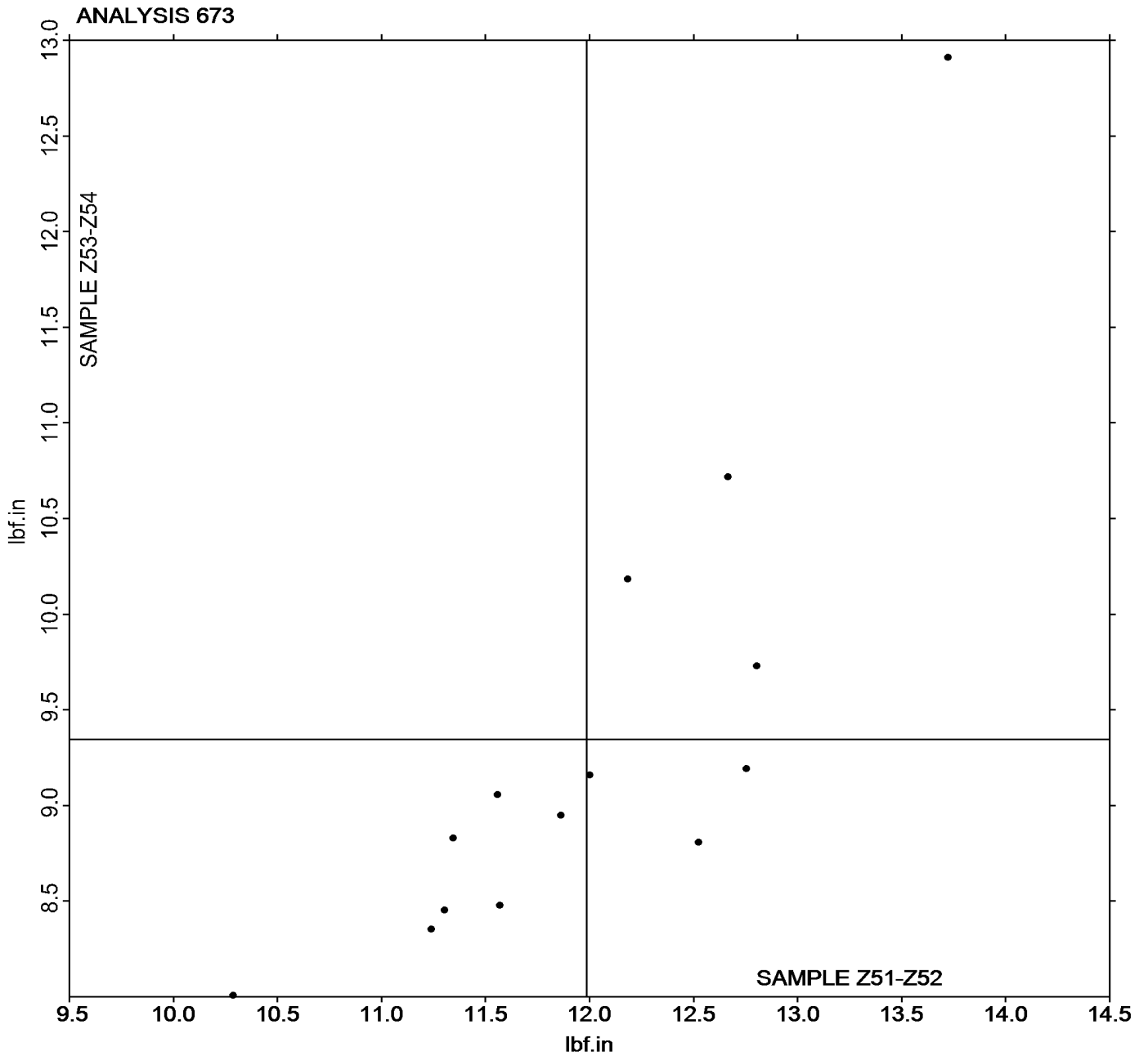
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample Z51 = 11.987 lbf.in

Grand Mean Sample Z52 = 9.3445 lbf.in



Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z51			Sample Z52			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		41.89	-5.13	-1.75	37.01	-3.94	-1.77	ZZ
3BLR8G		46.82	-0.20	-0.07	39.72	-1.22	-0.55	ZZ
4WHLRC		50.79	3.77	1.29	44.40	3.45	1.55	ZZ
8YTXY4		47.30	0.28	0.10	39.79	-1.16	-0.52	ZZ
92EYGW		52.34	5.32	1.82	44.65	3.70	1.66	ZZ
9CYBT9		46.70	-0.32	-0.11	39.73	-1.21	-0.55	ZZ
APJ8BH		46.12	-0.90	-0.31	40.16	-0.79	-0.36	ZZ
ENV8H4		45.07	-1.95	-0.67	40.89	-0.06	-0.03	ZZ
GPGQDL		46.88	-0.14	-0.05	42.06	1.11	0.50	ZZ
HDJA2P		50.07	3.05	1.04	42.93	1.98	0.89	ZZ
K43AKJ		43.34	-3.68	-1.26	38.59	-2.36	-1.06	ZZ
KJJ8PK		48.76	1.74	0.59	43.01	2.07	0.93	ZZ
KJV4UP		48.37	1.35	0.46	41.18	0.24	0.11	ZZ
PT63QV		43.84	-3.18	-1.09	39.14	-1.81	-0.81	ZZ

Summary Statistics

Grand Means

47.018 lbf.in

40.946 lbf.in

Std Dev Btwn Labs

2.929 lbf.in

2.225 lbf.in

Statistics based on 14 of 14 reporting participants

Summary Statistics in SI Units

Grand Means

53.123 dN.m

46.263 dN.m

Std Dev Btwn Labs

3.309 dN.m

2.514 dN.m

Statistics based on 14 of 14 reporting participants

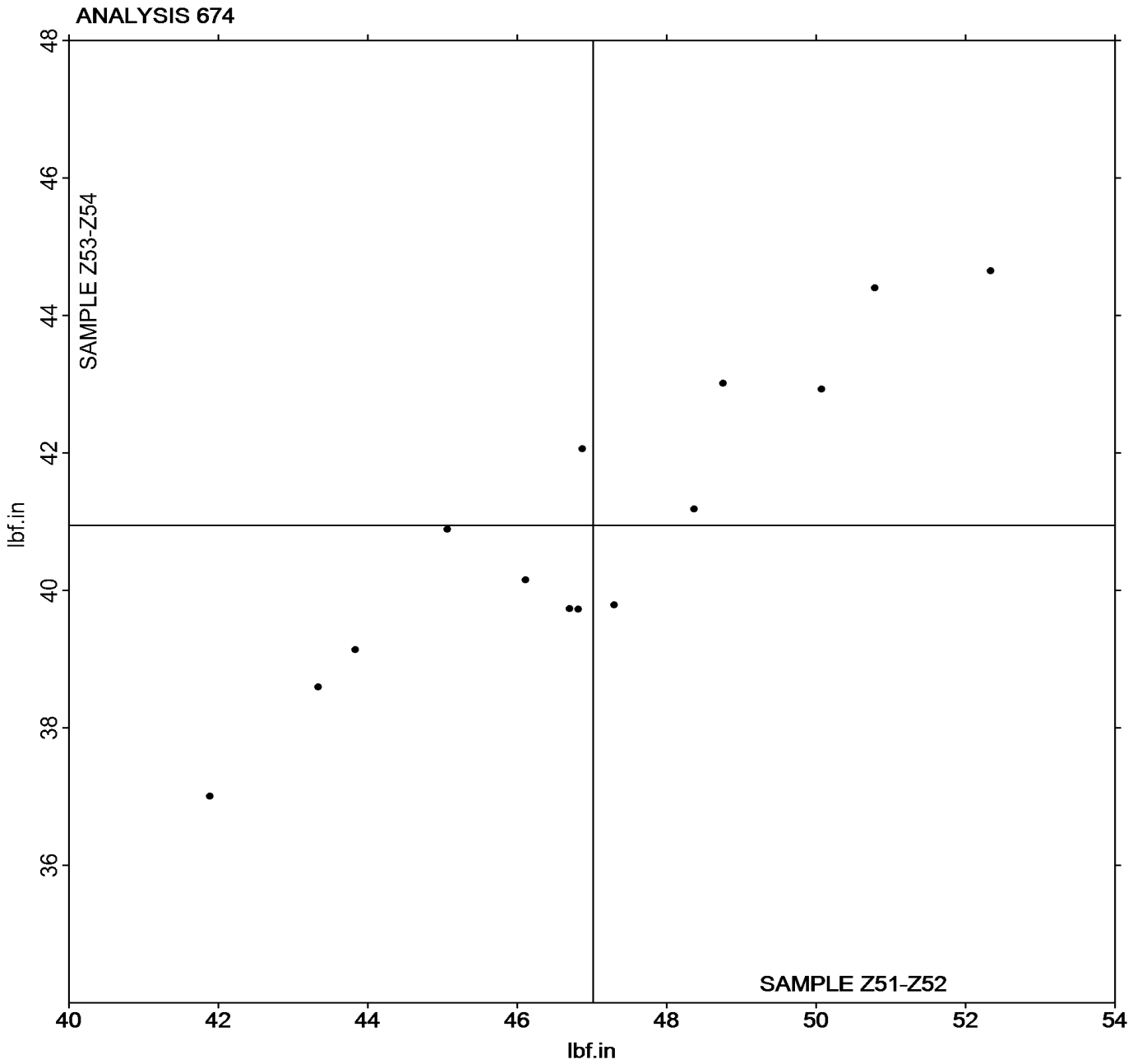
Samples Z51-Z52: EPDM compound #1 & Z53-Z54: EPDM compound #2

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample Z51 = 47.018 lbf.in

Grand Mean Sample Z52 = 40.946 lbf.in



Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		0.7650	-0.0668	-1.31	0.7233	-0.0734	-1.35	XX
3GCX4R		0.7767	-0.0551	-1.08	0.7900	-0.0067	-0.12	MC
4LKKF8		0.8633	0.0315	0.62	0.8267	0.0300	0.55	MC
92EYGW		0.8200	-0.0118	-0.23	0.7483	-0.0484	-0.89	MC
APJ8BH		0.8167	-0.0151	-0.30	0.7500	-0.0467	-0.86	MC
AZ2N4P		0.8550	0.0232	0.45	0.8200	0.0233	0.43	MC
CVGFTV		0.8584	0.0266	0.52	0.8167	0.0200	0.37	MC
DGVMHT		0.8417	0.0099	0.19	0.7983	0.0016	0.03	MC
DZ7FMG	*	0.8667	0.0349	0.68	0.9183	0.1216	2.23	MC
E6VEDG		0.8517	0.0199	0.39	0.8083	0.0116	0.21	XX
F8Y87U		0.7900	-0.0418	-0.82	0.7350	-0.0617	-1.13	MC
FD6ZZQ		0.7533	-0.0785	-1.53	0.7317	-0.0650	-1.19	TP
GM9FJ3		0.8850	0.0532	1.04	0.8583	0.0616	1.13	MC
GPGQDL		0.8300	-0.0018	-0.04	0.7883	-0.0084	-0.15	MC
HDJA2P		0.9433	0.1115	2.18	0.8850	0.0883	1.62	MC
HM9XYD		0.7383	-0.0935	-1.83	0.7317	-0.0650	-1.19	MC
LALYHY		0.8250	-0.0068	-0.13	0.7867	-0.0100	-0.18	MC
LJEBUE		0.8550	0.0232	0.45	0.8217	0.0250	0.46	MP
N7G6ED		0.8600	0.0282	0.55	0.8000	0.0033	0.06	MC
PT63QV		0.8833	0.0515	1.01	0.8367	0.0400	0.73	MC
QWKUGN		0.8967	0.0649	1.27	0.8450	0.0483	0.89	MC
TC899D		0.8500	0.0182	0.36	0.8000	0.0033	0.06	TP
UAFDM4		0.7867	-0.0451	-0.88	0.7400	-0.0567	-1.04	MC
UEA8J6	X	0.5533	-0.2785	-5.45	0.5217	-0.2750	-5.05	MC
UGGPH2		0.8200	-0.0118	-0.23	0.7800	-0.0167	-0.31	MC
VH7F2K		0.9000	0.0682	1.33	0.8417	0.0450	0.83	MC
W878X9		0.8217	-0.0101	-0.20	0.7850	-0.0117	-0.21	MD
W9ZX4M		0.8367	0.0049	0.10	0.7917	-0.0050	-0.09	MC
WKQPRX	*	0.8133	-0.0185	-0.36	0.8700	0.0733	1.35	MC
XNLZYG	*	0.6983	-0.1335	-2.61	0.6500	-0.1467	-2.69	MD
YM8TDZ		0.8222	-0.0096	-0.19	0.7889	-0.0078	-0.14	MC
YN3D3K		0.8617	0.0299	0.58	0.8300	0.0333	0.61	MD

Summary Statistics

Grand Means

0.83179 minutes

0.79669 minutes

Std Dev Btwn Labs

0.05112 minutes

0.05449 minutes

Statistics based on 31 of 32 reporting participants

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #684

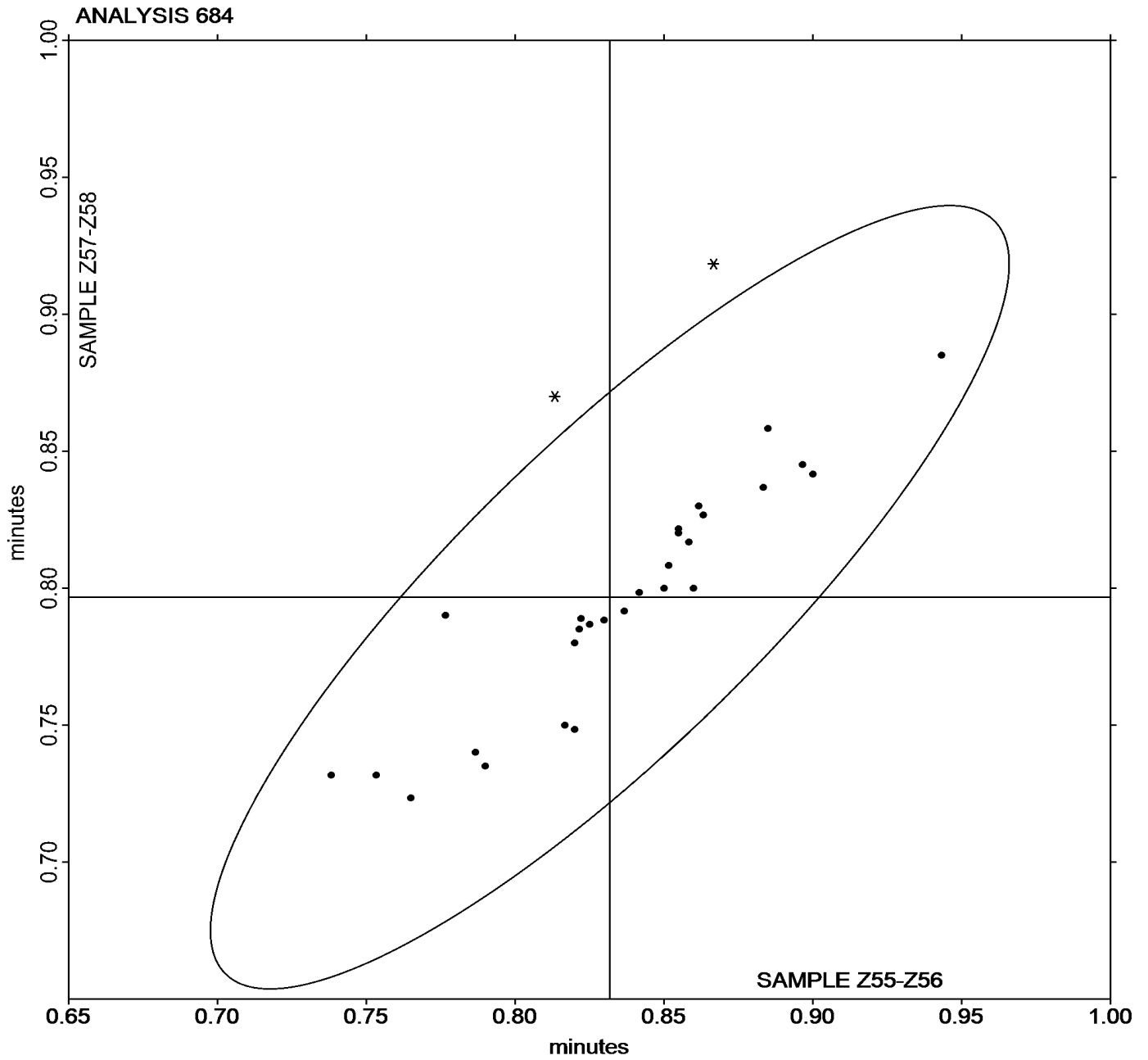
UEA8J6 (X) - Data for all Samples are low. Possible systematic error.

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample Z55 = 0.83179 minutes

Grand Mean Sample Z56 = 0.79669 minutes



Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		0.7167	0.0042	0.08	0.6933	0.0030	0.06	XX
3GCX4R		0.6917	-0.0208	-0.42	0.7100	0.0197	0.38	MC
4LKKF8		0.7133	0.0008	0.02	0.6883	-0.0020	-0.04	MC
92EYGW		0.6933	-0.0192	-0.39	0.6450	-0.0453	-0.88	MC
9UDMKY		0.6667	-0.0458	-0.92	0.6333	-0.0570	-1.11	MC
APJ8BH		0.7067	-0.0058	-0.12	0.6533	-0.0370	-0.72	MC
AZ2N4P		0.7150	0.0025	0.05	0.6967	0.0063	0.12	MC
B4HD3T		0.6650	-0.0475	-0.96	0.6317	-0.0587	-1.14	MC
CVGFTV		0.7389	0.0264	0.53	0.7028	0.0125	0.24	MC
DGVMHT		0.7267	0.0142	0.29	0.7050	0.0147	0.29	MC
DZ7FMG	*	0.7333	0.0208	0.42	0.7717	0.0813	1.59	MC
E6VEDG		0.7700	0.0575	1.16	0.7517	0.0613	1.20	XX
EM2GCP		0.7233	0.0108	0.22	0.6717	-0.0187	-0.36	MC
F8Y87U		0.6783	-0.0342	-0.69	0.6450	-0.0453	-0.88	MC
FD6ZZQ		0.7017	-0.0108	-0.22	0.6867	-0.0037	-0.07	TP
GM9FJ3		0.7883	0.0758	1.53	0.7633	0.0730	1.42	MC
GPGQDL		0.7300	0.0175	0.35	0.7050	0.0147	0.29	MC
HDJA2P		0.7933	0.0808	1.63	0.7550	0.0647	1.26	MC
HM9XYD		0.6500	-0.0625	-1.26	0.6483	-0.0420	-0.82	MC
LALYHY		0.7183	0.0058	0.12	0.7067	0.0163	0.32	MC
LJEBUE		0.6950	-0.0175	-0.35	0.6717	-0.0187	-0.36	MP
N7G6ED		0.7200	0.0075	0.15	0.7100	0.0197	0.38	MC
PT63QV		0.7583	0.0458	0.92	0.7267	0.0363	0.71	MC
QWKUGN		0.7233	0.0108	0.22	0.6950	0.0047	0.09	MC
TC899D		0.8167	0.1042	2.10	0.7833	0.0930	1.82	TP
UAFDM4	*	0.5750	-0.1375	-2.77	0.5567	-0.1337	-2.61	MC
UEA8J6		0.7067	-0.0058	-0.12	0.6733	-0.0170	-0.33	MC
UGGPH2		0.6614	-0.0511	-1.03	0.6389	-0.0514	-1.00	MC
VGX7B9		0.6733	-0.0392	-0.79	0.6450	-0.0453	-0.88	MC
VH7F2K		0.7717	0.0592	1.19	0.7233	0.0330	0.64	MC
W878X9		0.7533	0.0408	0.82	0.7267	0.0363	0.71	MD
W9ZX4M		0.7233	0.0108	0.22	0.7000	0.0097	0.19	MC
WKQPRX	*	0.7067	-0.0058	-0.12	0.7450	0.0547	1.07	MC
XNLZYG		0.5883	-0.1242	-2.50	0.5633	-0.1270	-2.48	MD
YM8TDZ		0.7111	-0.0014	-0.03	0.7083	0.0180	0.35	MC
YN3D3K		0.7450	0.0325	0.66	0.7200	0.0297	0.58	MD

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

		Summary Statistics	
Grand Means	0.71249 minutes		0.69033 minutes
Std Dev Btwn Labs	0.04960 minutes		0.05124 minutes
Statistics based on 36 of 36 reporting participants			

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: 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 686

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		2.910	-0.127	-0.76	2.853	-0.120	-0.74	XX
3GCX4R		2.963	-0.073	-0.44	2.953	-0.020	-0.12	MC
4LKKF8		3.262	0.225	1.35	3.143	0.170	1.05	MC
92EYGW		3.080	0.043	0.26	3.020	0.047	0.29	MC
9UDMKY		3.099	0.062	0.37	3.010	0.036	0.22	MC
APJ8BH		2.987	-0.050	-0.30	2.907	-0.067	-0.41	MC
AZ2N4P		2.903	-0.133	-0.80	2.858	-0.115	-0.71	MC
B4HD3T		3.087	0.050	0.30	3.008	0.035	0.22	MC
CVGFTV		3.095	0.058	0.35	3.036	0.063	0.39	MC
DGVMHT		3.268	0.232	1.39	3.187	0.213	1.32	MC
DZ7FMG	X	3.098	0.062	0.37	3.212	0.238	1.47	MC
E6VEDG		2.922	-0.115	-0.69	2.915	-0.058	-0.36	XX
EM2GCP	*	3.075	0.038	0.23	2.910	-0.063	-0.39	MC
F8Y87U		2.982	-0.055	-0.33	2.942	-0.032	-0.20	MC
FD6ZZQ		2.802	-0.235	-1.41	2.783	-0.190	-1.18	TP
GM9FJ3		3.173	0.137	0.82	3.075	0.102	0.63	MC
GPGQDL		3.060	0.023	0.14	3.015	0.042	0.26	MC
HDJA2P		3.188	0.152	0.91	3.130	0.157	0.97	MC
HM9XYD		2.913	-0.123	-0.74	2.803	-0.170	-1.05	MC
LALYHY		2.987	-0.050	-0.30	2.945	-0.028	-0.18	MC
LJEBUE		2.998	-0.038	-0.23	2.980	0.007	0.04	MC
N7G6ED		2.965	-0.072	-0.43	2.955	-0.018	-0.11	MC
PT63QV		3.235	0.198	1.19	3.168	0.195	1.21	MC
QWKUGN		3.230	0.193	1.16	3.202	0.228	1.41	MC
TC899D		3.150	0.113	0.68	3.083	0.110	0.68	TP
UAFDM4	*	2.545	-0.492	-2.96	2.478	-0.495	-3.06	MC
UEA8J6		2.927	-0.110	-0.66	2.837	-0.137	-0.85	MC
UGGPH2		3.015	-0.022	-0.13	2.925	-0.048	-0.30	MC
VGX7B9		3.170	0.133	0.80	3.092	0.118	0.73	MC
VH7F2K		3.245	0.208	1.25	3.177	0.203	1.26	MC
W878X9		3.010	-0.027	-0.16	2.982	0.008	0.05	MD
W9ZX4M		3.052	0.015	0.09	3.005	0.032	0.20	MC
WKQPRX	X	2.978	-0.058	-0.35	3.058	0.085	0.53	MC
XNLZYG		2.630	-0.407	-2.45	2.557	-0.417	-2.58	MD
YM8TDZ		3.086	0.049	0.30	2.995	0.021	0.13	MC
YN3D3K		3.238	0.202	1.21	3.167	0.193	1.20	MD

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

		Summary Statistics	
Grand Means	3.0368 minutes		2.9734 minutes
Std Dev Btwn Labs	0.1662 minutes		0.1617 minutes
Statistics based on 34 of 36 reporting participants			

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #686

DZ7FMG (X) - Inconsistency in testing between Sample groups.

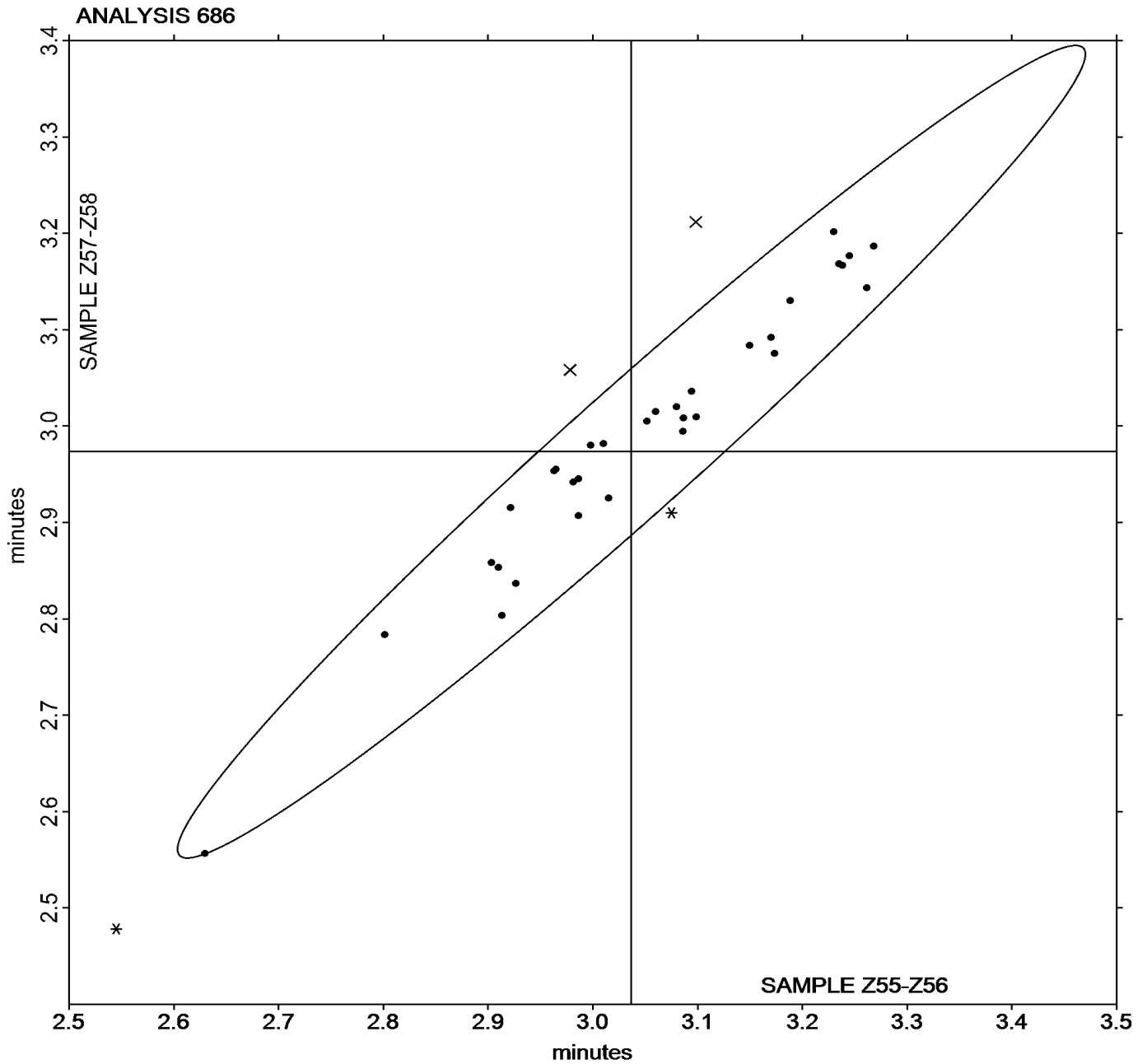
WKQPRX (X) - Inconsistency in testing between Sample groups.

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Grand Mean Sample Z55 = 3.0368 minutes

Grand Mean Sample Z56 = 2.9734 minutes



Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		5.853	-0.519	-2.18	5.777	-0.533	-2.19	XX
3GCX4R		6.382	0.010	0.04	6.248	-0.061	-0.25	MC
4LKKF8		6.643	0.271	1.14	6.468	0.159	0.65	MC
92EYGW		6.457	0.085	0.36	6.352	0.042	0.17	MC
9UDMKY		6.542	0.170	0.71	6.422	0.113	0.46	MC
APJ8BH		6.385	0.013	0.05	6.263	-0.046	-0.19	MC
AZ2N4P		6.293	-0.079	-0.33	6.213	-0.096	-0.39	MC
B4HD3T		6.318	-0.054	-0.23	6.213	-0.096	-0.39	MP
CVGFTV		6.306	-0.066	-0.28	6.281	-0.029	-0.12	MC
DGVMHT		6.833	0.461	1.94	6.775	0.466	1.91	MC
DZ7FMG		6.430	0.058	0.24	6.523	0.214	0.88	MC
E6VEDG		6.220	-0.152	-0.64	6.177	-0.133	-0.54	XX
EM2GCP		6.485	0.113	0.48	6.355	0.046	0.19	MC
F8Y87U		6.193	-0.179	-0.75	6.140	-0.169	-0.70	MC
FD6ZZQ		5.928	-0.444	-1.87	5.912	-0.398	-1.63	TP
GM9FJ3		6.470	0.098	0.41	6.422	0.112	0.46	MC
GPGQDL		6.255	-0.117	-0.49	6.202	-0.108	-0.44	MC
HDJA2P		6.642	0.270	1.14	6.560	0.251	1.03	MC
HM9XYD		6.390	0.018	0.08	6.423	0.114	0.47	MC
LALYHY		6.310	-0.062	-0.26	6.345	0.036	0.15	MC
LJEBUE		6.275	-0.097	-0.41	6.240	-0.069	-0.28	MP
N7G6ED		6.422	0.050	0.21	6.315	0.006	0.02	MC
PT63QV		6.580	0.208	0.88	6.507	0.197	0.81	MC
QWKUGN		6.540	0.168	0.71	6.493	0.184	0.75	MC
TC899D		6.300	-0.072	-0.30	6.250	-0.059	-0.24	TP
UAFDM4	*	5.738	-0.634	-2.67	5.613	-0.696	-2.86	MC
UEA8J6		6.258	-0.114	-0.48	6.117	-0.193	-0.79	MC
UGGPH2		6.237	-0.135	-0.57	6.201	-0.109	-0.45	MC
VGX7B9		6.557	0.185	0.78	6.473	0.164	0.67	MC
VH7F2K		6.760	0.388	1.63	6.647	0.337	1.38	MC
W878X9		6.068	-0.304	-1.28	6.043	-0.266	-1.09	MD
W9ZX4M		6.330	-0.042	-0.18	6.278	-0.031	-0.13	MC
WKQPRX		6.548	0.176	0.74	6.473	0.164	0.67	MC
XNLZYG	X	5.253	-1.119	-4.71	5.187	-1.123	-4.61	MD
YM8TDZ		6.361	-0.011	-0.05	6.303	-0.007	-0.03	MC
YN3D3K	*	6.710	0.338	1.42	6.807	0.497	2.04	MD

**Rubber Interlaboratory Testing Program
Analysis 687****MDR Vulcanization-Cure Time 90% (minutes)**

		Summary Statistics
Grand Means	6.3720 minutes	6.3095 minutes
Std Dev Btwn Labs	0.2376 minutes	0.2438 minutes
Statistics based on 35 of 36 reporting participants		

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #687

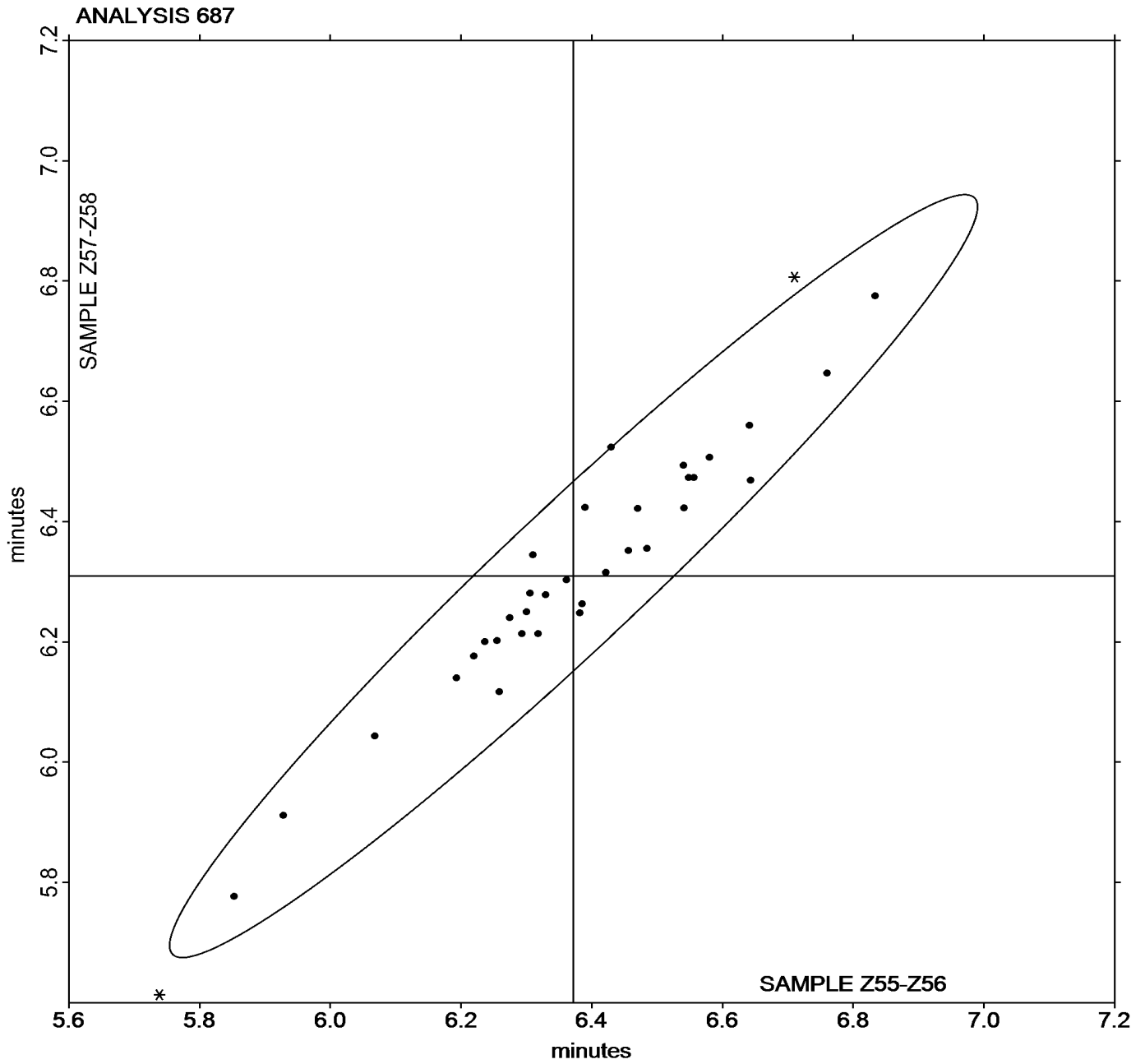
XNLZYG (X) - Data for all Samples are low. Possible systematic error.

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample Z55 = 6.3720 minutes

Grand Mean Sample Z56 = 6.3095 minutes



Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		2.083	-0.228	-1.39	2.243	-0.195	-1.00	XX
3GCX4R	X	2.777	0.465	2.83	2.547	0.108	0.56	MC
4LKKF8		2.328	0.017	0.10	2.423	-0.015	-0.08	MC
92EYGW		2.380	0.069	0.42	2.570	0.132	0.68	MC
9UDMKY		2.092	-0.220	-1.33	2.179	-0.259	-1.33	MC
APJ8BH		2.078	-0.233	-1.42	2.210	-0.228	-1.17	MC
AZ2N4P		2.382	0.070	0.43	2.528	0.090	0.46	MC
B4HD3T		2.328	0.016	0.10	2.456	0.018	0.09	MP
CVGFTV		2.253	-0.058	-0.35	2.362	-0.077	-0.39	MC
DGVMHT		2.612	0.300	1.82	2.773	0.335	1.72	MC
DZ7FMG	*	2.337	0.025	0.15	2.242	-0.197	-1.01	MC
E6VEDG		2.282	-0.030	-0.18	2.365	-0.073	-0.38	XX
EM2GCP		2.338	0.027	0.16	2.607	0.168	0.87	MC
F8Y87U		2.627	0.315	1.91	2.827	0.388	2.00	MC
FD6ZZQ		2.225	-0.086	-0.53	2.313	-0.125	-0.64	TP
GM9FJ3		2.162	-0.150	-0.91	2.275	-0.163	-0.84	MC
GPGQDL		2.265	-0.046	-0.28	2.335	-0.103	-0.53	MC
HDJA2P		2.238	-0.073	-0.44	2.372	-0.067	-0.34	MC
HM9XYD	X	3.222	0.910	5.53	3.470	1.032	5.30	MC
LALYHY		2.523	0.212	1.29	2.672	0.233	1.20	MC
LJEBUE		2.198	-0.114	-0.69	2.347	-0.091	-0.47	MP
N7G6ED		2.379	0.068	0.41	2.477	0.038	0.20	MC
PT63QV		2.267	-0.045	-0.27	2.347	-0.092	-0.47	MC
QWKUGN		2.165	-0.146	-0.89	2.317	-0.121	-0.62	MC
TC899D		2.183	-0.128	-0.78	2.383	-0.055	-0.28	TP
UAFDM4	X	3.307	0.996	6.05	3.620	1.182	6.07	MC
UEA8J6		2.387	0.075	0.46	2.660	0.222	1.14	MC
UGGPH2		2.168	-0.143	-0.87	2.295	-0.143	-0.73	MC
VGX7B9		2.712	0.400	2.43	2.870	0.432	2.22	MC
VH7F2K		2.250	-0.061	-0.37	2.345	-0.093	-0.48	MC
W878X9		2.082	-0.229	-1.39	2.210	-0.228	-1.17	MD
W9ZX4M		2.335	0.024	0.14	2.473	0.035	0.18	MC
WKQPRX	*	2.372	0.060	0.37	2.275	-0.163	-0.84	MC
XNLZYG		2.376	0.065	0.39	2.489	0.051	0.26	MD
YM8TDZ		2.643	0.332	2.02	2.868	0.430	2.21	MC
YN3D3K		2.227	-0.084	-0.51	2.354	-0.084	-0.43	MD

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

		Summary Statistics	
Grand Means	2.3115 lbf.in	2.4383 lbf.in	
Stnd Dev Btwn Labs	0.1647 lbf.in	0.1946 lbf.in	
Statistics based on 33 of 36 reporting participants			

		Summary Statistics in SI Units	
Grand Means	2.6116 dN.m	2.7549 dN.m	
Stnd Dev Btwn Labs	0.1861 dN.m	0.2199 dN.m	
Statistics based on 33 of 36 reporting participants			

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: EPDM compound, batch #2

Comments on assigned Data Flags for Test #688

3GCX4R (X) - Inconsistency in testing between Sample groups. Data for Sample group Z55-Z56 are high.

HM9XYD (X) - Data for all Samples are high. Possible systematic error. Inconsistency in testing within both Sample groups.

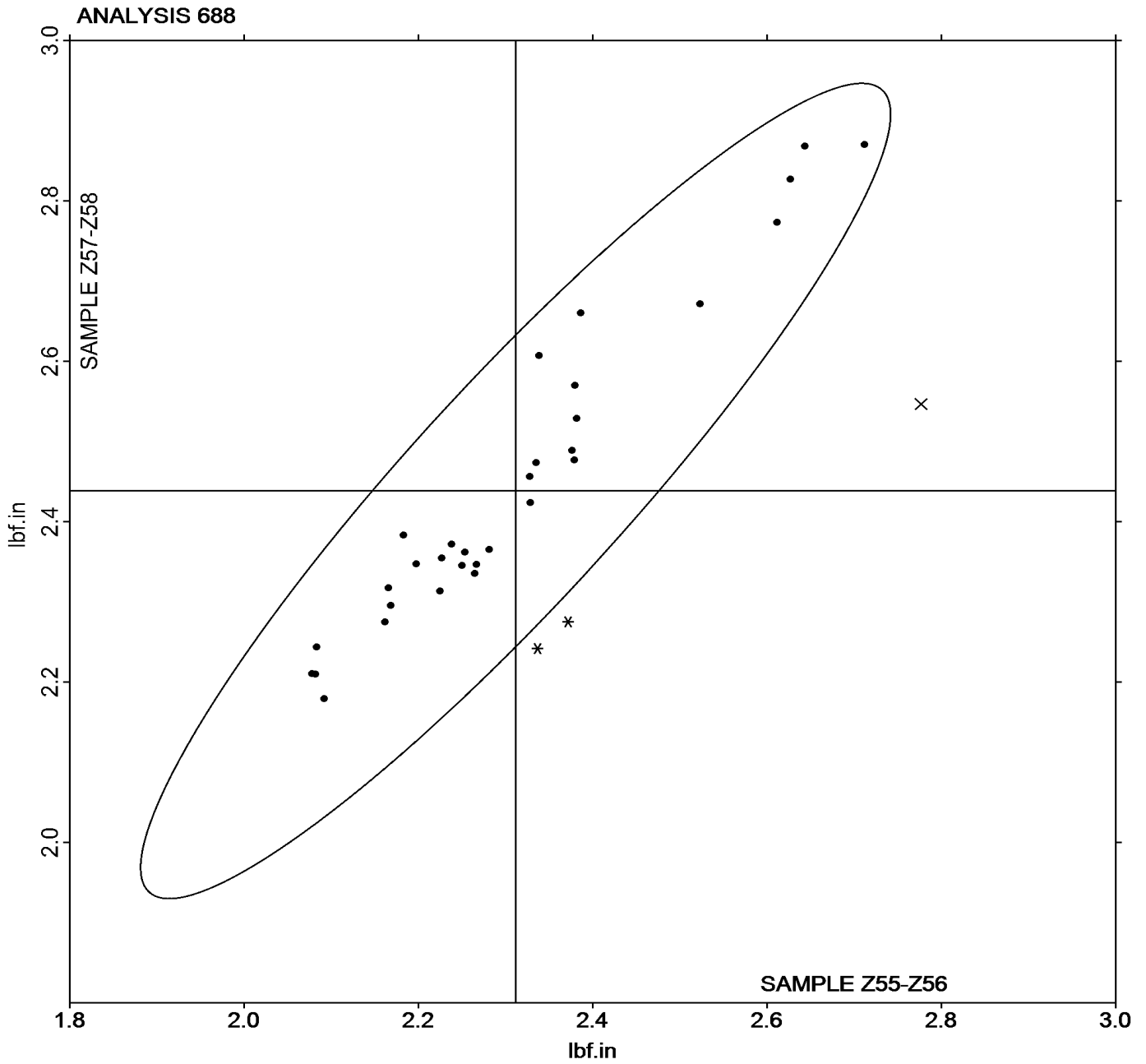
UAFDM4 (X) - Data for all Samples are high. Possible systematic error.

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample Z55 = 2.3115 lbf.in

Grand Mean Sample Z56 = 2.4383 lbf.in



Rubber Interlaboratory Testing Program

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z55			Sample Z56			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2U3CQF		13.46	-1.74	-1.47	13.14	-1.80	-1.63	XX
3GCX4R		12.29	-2.91	-2.46	12.19	-2.75	-2.50	MC
4LKKF8		16.00	0.79	0.67	15.78	0.84	0.76	MC
92EYGW		15.56	0.36	0.30	15.28	0.34	0.30	MC
9UDMKY		15.62	0.42	0.35	14.95	0.01	0.01	MC
APJ8BH		14.63	-0.57	-0.49	14.61	-0.33	-0.30	MC
AZ2N4P		15.70	0.50	0.42	15.54	0.60	0.55	MC
B4HD3T		15.35	0.14	0.12	15.03	0.09	0.09	MP
CVGFTV		15.39	0.18	0.16	15.11	0.17	0.16	MC
DGVMHT		15.26	0.06	0.05	14.96	0.02	0.02	MC
DZ7FMG		15.57	0.37	0.31	15.64	0.70	0.63	MC
E6VEDG		14.35	-0.85	-0.72	13.82	-1.12	-1.02	XX
EM2GCP		15.14	-0.06	-0.05	14.85	-0.09	-0.08	MC
F8Y87U		15.55	0.35	0.29	15.19	0.25	0.23	MC
FD6ZZQ		13.67	-1.54	-1.30	13.58	-1.36	-1.23	TP
GM9FJ3		14.28	-0.92	-0.78	14.42	-0.52	-0.47	MC
GPGQDL		14.65	-0.56	-0.47	14.26	-0.68	-0.61	MC
HDJA2P		15.72	0.52	0.44	15.52	0.58	0.53	MC
HM9XYD		15.51	0.30	0.26	15.53	0.59	0.53	MC
LALYHY		15.17	-0.04	-0.03	14.69	-0.25	-0.23	MC
LJEBUE		14.80	-0.40	-0.34	14.74	-0.20	-0.18	XX
N7G6ED	*	16.07	0.87	0.73	15.10	0.16	0.14	MC
PT63QV		15.18	-0.02	-0.02	14.91	-0.03	-0.03	MC
QWKUGN		14.91	-0.29	-0.25	14.60	-0.34	-0.31	MC
TC899D		13.18	-2.02	-1.71	13.05	-1.89	-1.72	TP
UAFDM4	*	18.57	3.37	2.85	17.85	2.91	2.65	MC
UEA8J6	*	17.79	2.59	2.19	17.67	2.73	2.48	MC
UGGPH2		14.78	-0.42	-0.36	14.63	-0.31	-0.28	MC
VGX7B9		17.71	2.51	2.12	16.89	1.95	1.77	MC
VH7F2K		15.20	-0.01	0.00	15.16	0.22	0.20	MC
W878X9		14.19	-1.01	-0.86	13.79	-1.15	-1.04	MD
W9ZX4M		15.15	-0.05	-0.04	14.81	-0.13	-0.12	MC
WKQPRX		14.95	-0.25	-0.21	15.28	0.34	0.30	MC
XNLZYG		15.67	0.46	0.39	15.16	0.22	0.20	MD
YM8TDZ		15.30	0.10	0.08	15.04	0.10	0.09	MC
YN3D3K		15.00	-0.21	-0.18	15.08	0.14	0.12	MD

**Rubber Interlaboratory Testing Program
Analysis 689****MDR Vulcanization: Maximum Torque (lbf.in)**

Summary Statistics

Grand Means

15.202 lbf.in

14.939 lbf.in

Std Dev Btwn Labs

1.182 lbf.in

1.100 lbf.in

Statistics based on 36 of 36 reporting participants

Summary Statistics in SI Units

Grand Means

17.176 dN.m

16.879 dN.m

Std Dev Btwn Labs

1.336 dN.m

1.243 dN.m

Statistics based on 36 of 36 reporting participants

Samples Z55-Z56: EPDM compound, batch #1 & Z57-Z58: EPDM compound, batch #2

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample Z55 = 15.202 lbf.in

Grand Mean Sample Z56 = 14.939 lbf.in

