

Rubber Interlaboratory Testing Program

Summary Report #162- 4th Qtr 2009

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605	Tensile Strength: Precured Rubber Samples
606	Ultimate Elongation: Precured Rubber Samples
607	Stress at 300% Elongation: Precured Samples
608	Stress at 100% Elongation: Precured Samples
620	Hardness (Type A): Precured Rubber Samples
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660	Mooney Viscosity (4-minute readings)
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662	Mooney Stress Relaxation: t80
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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. More than 2400 labs from the U.S., as well as more than 55 countries, currently participate in the CTS programs.

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WebCode	Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the Rubber Report published on the CTS Web site. The WebCode for each analysis can be found in the Performance Analysis Report mailed to each participant.
Lab Mean	Tensile & Hardness: the average of the median values obtained for each sample. All other tests: the average of the test results obtained by the participant.
Grand Mean	The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.
Difference from Grand Mean	The difference of the LAB MEAN from the GRAND MEAN.
Between-Lab Standard Deviation	An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).
Comparative Performance Value	An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa). The critical value for each CPV will vary depending on the number of labs participating in a test.
Inst Code	If instruments are tracked in a test, a code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section).
Data Flag	DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

<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 D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2LWZTM		3,231.0	-20.1	-0.13	3,182.0	-73.1	-0.47	ZZ
2MY8CD		3,557.0	305.9	1.98	3,416.5	161.4	1.04	ZZ
3BMV3P		3,309.0	57.9	0.38	3,267.0	11.9	0.08	ZZ
3HMG6		3,089.3	-161.7	-1.05	3,234.4	-20.8	-0.13	ZZ
3WQ9ZB		3,173.5	-77.6	-0.50	3,283.5	28.4	0.18	ZZ
4H4QWQ		3,043.6	-207.4	-1.34	3,242.3	-12.8	-0.08	ZZ
6A8WZY		2,963.5	-287.6	-1.86	3,073.0	-182.1	-1.18	ZZ
6CYMPA		3,129.5	-121.6	-0.79	3,294.5	39.4	0.25	ZZ
6FG6HE		3,082.5	-168.6	-1.09	3,057.5	-197.6	-1.28	ZZ
6G72MU		3,298.0	46.9	0.30	3,201.5	-53.6	-0.35	ZZ
7EUHDX		3,270.6	19.6	0.13	3,169.1	-86.0	-0.56	ZZ
7X89E3		3,178.0	-73.1	-0.47	3,202.0	-53.1	-0.34	ZZ
82LAU8		3,277.0	25.9	0.17	3,364.5	109.4	0.71	ZZ
83ARL7	*	3,101.5	-149.6	-0.97	3,371.0	115.9	0.75	ZZ
8QK6ZQ		3,119.5	-131.6	-0.85	3,101.5	-153.6	-0.99	ZZ
8VT7NU		3,472.0	220.9	1.43	3,373.0	117.9	0.76	ZZ
A39DUR		3,264.5	13.4	0.09	3,129.5	-125.6	-0.81	ZZ
A3J93A		3,308.4	57.3	0.37	3,161.8	-93.4	-0.60	ZZ
A47VW6		3,268.0	16.9	0.11	3,235.5	-19.6	-0.13	ZZ
APZPLU		3,076.3	-174.8	-1.13	3,031.3	-223.8	-1.44	ZZ
AVTP3B		3,520.8	269.8	1.75	3,321.4	66.3	0.43	ZZ
AVUN6G		3,337.0	85.9	0.56	3,372.0	116.9	0.75	ZZ
AXCYV7		2,986.4	-264.7	-1.72	3,016.8	-238.3	-1.54	ZZ
AYUYZG		3,388.1	137.0	0.89	3,320.0	64.9	0.42	ZZ
B2923E		3,303.5	52.4	0.34	3,490.5	235.4	1.52	ZZ
BFJH2H		3,490.0	238.9	1.55	3,339.0	83.9	0.54	ZZ
BRA3V8		3,080.6	-170.4	-1.10	3,063.2	-191.9	-1.24	ZZ
CDWHD		3,194.5	-56.6	-0.37	3,032.0	-223.1	-1.44	ZZ
CKXDRY		3,200.2	-50.8	-0.33	3,207.4	-47.8	-0.31	ZZ
CQ444K		3,388.5	137.4	0.89	3,200.0	-55.1	-0.36	ZZ
CWUMA		3,206.5	-44.6	-0.29	3,151.5	-103.6	-0.67	ZZ
DMMAN		3,433.5	182.4	1.18	3,489.5	234.4	1.51	ZZ
DZ8PPB		3,153.9	-97.2	-0.63	3,222.0	-33.1	-0.21	ZZ
E89LC2		3,268.5	17.4	0.11	3,177.5	-77.6	-0.50	ZZ
EEGZFG		3,070.5	-180.6	-1.17	3,122.7	-132.4	-0.85	ZZ

Rubber Interlaboratory Testing Program

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
EEJRK7		3,216.9	-34.2	-0.22	3,335.6	80.5	0.52	ZZ
EL6JW7		3,303.7	52.6	0.34	3,278.4	23.3	0.15	ZZ
ERHAQY		3,363.5	112.4	0.73	3,367.5	112.4	0.73	ZZ
F3ABCF		3,418.0	166.9	1.08	3,277.0	21.9	0.14	ZZ
G39RAW		3,026.2	-224.8	-1.46	3,095.9	-159.3	-1.03	ZZ
G7DW6B		3,331.0	79.9	0.52	3,468.0	212.9	1.37	ZZ
GCJKN4		3,211.5	-39.6	-0.26	3,254.0	-1.1	-0.01	ZZ
GDL6ZE		3,436.5	185.4	1.20	3,477.0	221.9	1.43	ZZ
GGJHQH		3,218.0	-33.1	-0.21	3,246.5	-8.6	-0.06	ZZ
HMYR3L		3,234.5	-16.6	-0.11	3,347.0	91.9	0.59	ZZ
HVML4		3,245.0	-6.1	-0.04	3,327.5	72.4	0.47	ZZ
J97QQJ	*	3,003.5	-247.6	-1.60	2,852.0	-403.1	-2.60	ZZ
JDRFHZ		3,370.7	119.6	0.78	3,440.3	185.2	1.19	ZZ
JFVDZ		3,361.5	110.4	0.72	3,345.0	89.9	0.58	ZZ
JQG7CD		3,089.0	-162.1	-1.05	3,166.3	-88.9	-0.57	ZZ
JRH92P		3,340.2	89.2	0.58	3,366.4	111.2	0.72	ZZ
JVUW87		3,430.5	179.4	1.16	3,403.5	148.4	0.96	ZZ
JZPTK7		3,338.0	86.9	0.56	3,474.0	218.9	1.41	ZZ
K9C76V		2,875.5	-375.6	-2.43	2,988.0	-267.1	-1.72	ZZ
KWCTEX		3,168.0	-83.1	-0.54	3,249.5	-5.6	-0.04	ZZ
L28TGX		3,191.5	-59.6	-0.39	3,228.0	-27.1	-0.18	ZZ
L4GTL6		3,336.0	84.9	0.55	3,230.0	-25.1	-0.16	ZZ
LB3JET		3,327.5	76.4	0.50	3,255.0	-0.1	0.00	ZZ
LRUZTU		3,177.5	-73.6	-0.48	3,297.0	41.9	0.27	ZZ
LTMUAD		3,195.5	-55.6	-0.36	3,334.5	79.4	0.51	ZZ
LV4REH	X	3,501.5	250.4	1.62	3,787.0	531.9	3.43	ZZ
LVZQBQ		2,958.0	-293.1	-1.90	3,023.5	-231.6	-1.49	ZZ
LWZ4DY		3,281.5	30.4	0.20	3,393.9	138.8	0.90	ZZ
ME9XYB	*	2,842.8	-408.3	-2.65	2,886.3	-368.9	-2.38	ZZ
MJCEZE		3,339.0	87.9	0.57	3,090.5	-164.6	-1.06	ZZ
MTYDQ		3,068.3	-182.8	-1.18	3,021.2	-234.0	-1.51	ZZ
N7WZ2K		3,356.5	105.4	0.68	3,308.0	52.9	0.34	ZZ
NEVYVK		3,411.0	159.9	1.04	3,298.0	42.8	0.28	ZZ
P24U6Z		3,157.0	-94.1	-0.61	3,085.0	-170.1	-1.10	ZZ
PA7M2Z		3,285.6	34.5	0.22	3,132.7	-122.4	-0.79	ZZ

Analysis 605

Tensile Strength (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
PEE9GW		3,265.5	14.4	0.09	3,416.0	160.9	1.04	ZZ
PGWB9C		3,354.8	103.7	0.67	3,418.6	163.4	1.05	ZZ
PLUBK8		3,122.0	-129.1	-0.84	3,189.4	-65.7	-0.42	ZZ
PQYETT		3,473.7	222.6	1.44	3,467.2	212.0	1.37	ZZ
PRQ8UD		3,262.5	11.4	0.07	3,237.0	-18.1	-0.12	ZZ
PX8W69		3,218.0	-33.1	-0.21	3,245.0	-10.1	-0.07	ZZ
Q74XCE		3,395.0	143.9	0.93	3,426.0	170.9	1.10	ZZ
QBKETH		3,063.5	-187.6	-1.22	3,114.0	-141.1	-0.91	ZZ
QYMJBU		2,938.2	-312.9	-2.03	2,924.1	-331.0	-2.14	ZZ
RZPTNG		3,030.5	-220.6	-1.43	3,143.0	-112.1	-0.72	ZZ
T2MHKC		3,293.8	42.8	0.28	3,309.1	53.9	0.35	ZZ
T2UEHU		3,368.6	117.5	0.76	3,243.0	-12.2	-0.08	ZZ
TDECXZ		3,377.1	126.0	0.82	3,353.4	98.3	0.63	ZZ
TNUNQN		3,394.5	143.4	0.93	3,365.0	109.9	0.71	ZZ
U97JNE		3,396.8	145.8	0.94	3,295.3	40.2	0.26	ZZ
UAV8UH		3,382.5	131.4	0.85	3,428.5	173.4	1.12	ZZ
UCA2DV		3,486.0	234.9	1.52	3,510.5	255.4	1.65	ZZ
UJ6L3W		3,488.4	237.3	1.54	3,602.6	347.5	2.24	ZZ
UK2X2D	*	3,444.0	192.9	1.25	3,636.5	381.4	2.46	ZZ
UL8TYW		3,141.5	-109.6	-0.71	3,011.5	-243.6	-1.57	ZZ
VNHCVH		3,254.7	3.6	0.02	3,193.0	-62.1	-0.40	ZZ
W34QGG		3,470.6	219.5	1.42	3,417.7	162.5	1.05	ZZ
WVQW6		3,135.7	-115.3	-0.75	3,129.9	-125.2	-0.81	ZZ
XJJWXZ	X	47,493.6	544,242.6	10,006.07	974,343.4	,971,088.3	12,717.79	ZZ
Y8G6GK		3,315.1	64.0	0.41	3,442.8	187.6	1.21	ZZ
YG2K2G		3,317.0	65.9	0.43	3,286.5	31.4	0.20	ZZ
ZFT4PA		3,042.1	-208.9	-1.35	2,966.4	-288.7	-1.86	ZZ
ZKYJV7		3,485.5	234.4	1.52	3,269.0	13.9	0.09	ZZ
ZQJKXA	M	No data reported for this sample			3,095.0	-160.1	-1.03	ZZ
ZU2NJJ		3,400.5	149.4	0.97	3,363.5	108.4	0.70	ZZ
ZUDEH7		3,197.5	-53.6	-0.35	3,327.5	72.4	0.47	ZZ
ZYPKXB		3,194.7	-56.4	-0.37	3,266.4	11.2	0.07	ZZ

Analysis 605

Tensile Strength (psi)

Summary Statistics

Grand Means

3,251.06 psi

3,255.13 psi

Std Dev Btwn Labs

154.33 psi

154.99 psi

Statistics based on 99 of 102 reporting participants

Summary Statistics in SI Units

Grand Means

22.415 MPa

22.44 MPa

Std Dev Btwn Labs

1.064 MPa

1.07 MPa

Statistics based on 99 of 102 reporting participants

Samples D91-D92: Polyisoprene compound, batch #1 & D93-D94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #605

LV4REH (X) - Inconsistency in testing between Sample sets. Data for Sample set D93-D94 are high.

XJJWXZ (X) - Extreme data for both Sample sets.

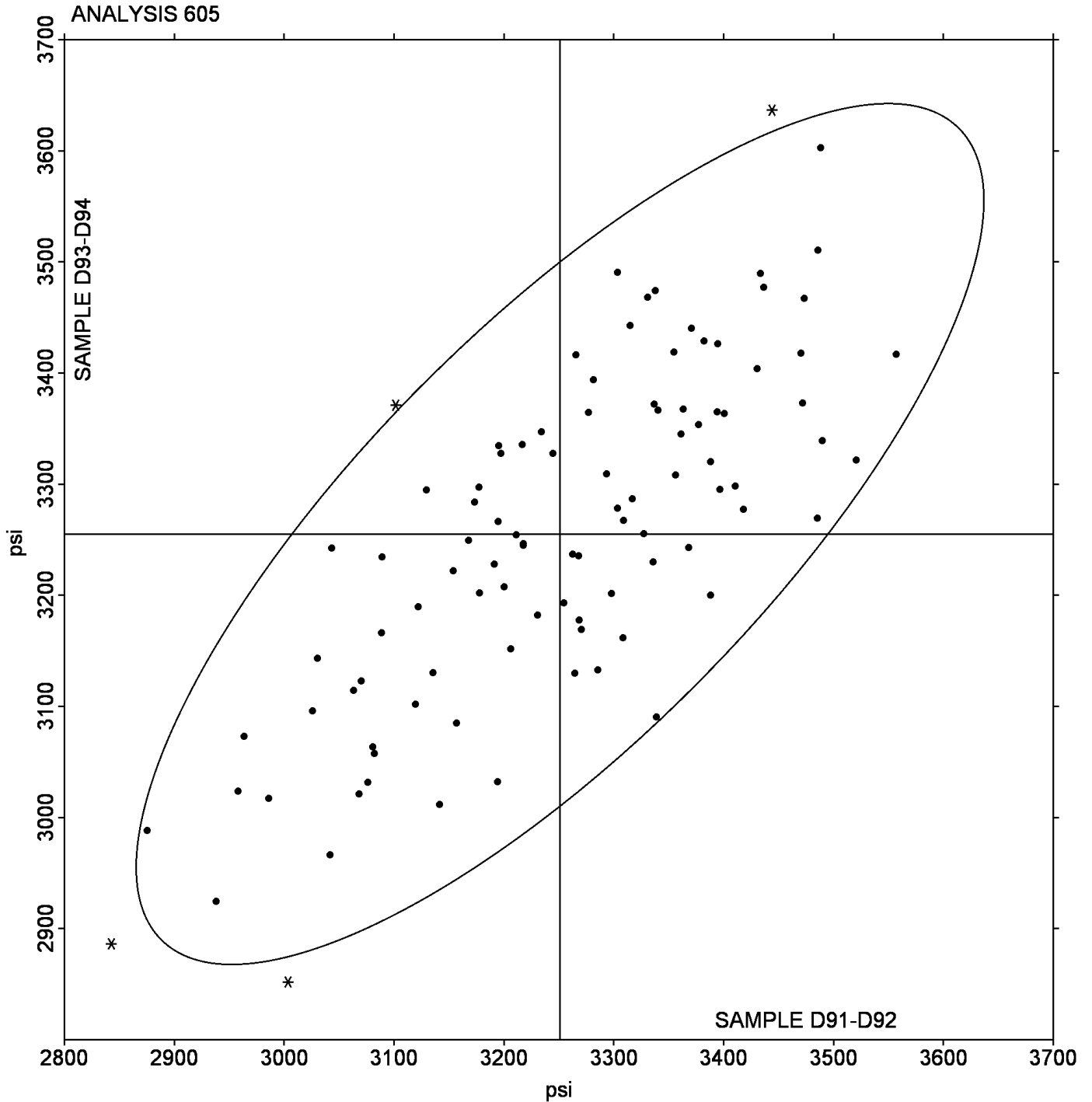
ZQJKXA (M) - Data not reported for Sample set D91-D92.

Analysis 605

Tensile Strength (psi)

Grand Mean Sample D91-D92 = 3,251.06 psi

Grand Mean Sample D93-D94 = 3,255.13 psi



Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2J776D		562.5	-7.9	-0.33	575.0	2.7	0.11	ZZ
2UVYQB		592.0	21.6	0.90	596.0	23.7	1.01	ZZ
3ADZHB		595.4	25.1	1.04	587.1	14.7	0.63	ZZ
3DUGPW		558.0	-12.4	-0.52	555.0	-17.3	-0.74	ZZ
44VA42		560.0	-10.4	-0.43	561.8	-10.6	-0.45	ZZ
4AVDJT	X	354.0	-216.4	-9.01	410.5	-161.9	-6.92	ZZ
4D8K42		516.0	-54.4	-2.26	527.5	-44.8	-1.92	ZZ
4K2ERD		543.0	-27.4	-1.14	554.0	-18.3	-0.78	ZZ
4NDKUD		544.0	-26.4	-1.10	547.0	-25.3	-1.08	ZZ
4VX3BP		585.3	14.9	0.62	587.4	15.1	0.64	ZZ
6GYE9		588.8	18.4	0.77	605.1	32.8	1.40	ZZ
74PMZT		564.0	-6.4	-0.27	579.5	7.2	0.31	ZZ
79VC7E		572.0	1.6	0.07	572.5	0.2	0.01	ZZ
7KFHBB		561.5	-8.9	-0.37	537.5	-34.8	-1.49	ZZ
7TZHCU		559.5	-10.9	-0.45	560.5	-11.8	-0.51	ZZ
7VLU4R		561.0	-9.4	-0.39	570.5	-1.8	-0.08	ZZ
82VD3W		533.0	-37.4	-1.56	547.0	-25.3	-1.08	ZZ
84N96Y	X	541.5	-28.9	-1.20	501.5	-70.8	-3.03	ZZ
8EJELN		564.5	-5.9	-0.24	571.5	-0.8	-0.04	ZZ
8J9GEG		597.0	26.6	1.11	589.5	17.2	0.73	ZZ
8KLHLV		579.0	8.6	0.36	584.0	11.7	0.50	ZZ
8ZAWM		559.5	-10.9	-0.45	544.0	-28.3	-1.21	ZZ
98MW76		593.0	22.6	0.94	603.5	31.2	1.33	ZZ
9PRUJG		606.0	35.6	1.48	601.5	29.2	1.25	ZZ
A3XTHD		555.0	-15.4	-0.64	590.0	17.7	0.76	ZZ
ANDMX	*	520.0	-50.4	-2.10	509.5	-62.8	-2.69	ZZ
B3QWZ9		577.4	7.0	0.29	588.0	15.6	0.67	ZZ
B9F8HJ		547.8	-22.6	-0.94	567.6	-4.8	-0.20	ZZ
BCTAYM		575.5	5.1	0.21	588.5	16.2	0.69	ZZ
BFPTXP		545.0	-25.4	-1.06	550.0	-22.3	-0.96	ZZ
CDVLRH	X	638.0	67.6	2.82	654.0	81.7	3.49	ZZ
DQ8UX8		572.5	2.1	0.09	568.0	-4.3	-0.19	ZZ
DYB8HF		596.0	25.6	1.07	588.0	15.7	0.67	ZZ
DYWM4		573.5	3.1	0.13	581.5	9.2	0.39	ZZ
EC9UUH		563.5	-6.9	-0.29	553.3	-19.1	-0.82	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
EJ8XLE		553.0	-17.4	-0.72	550.0	-22.3	-0.96	ZZ
ENDNR2		519.5	-50.9	-2.12	544.5	-27.8	-1.19	ZZ
ERPRCP		607.5	37.1	1.55	606.0	33.7	1.44	ZZ
F7VMEV		560.5	-9.8	-0.41	565.6	-6.8	-0.29	ZZ
FE8E9Z	X	401.5	-168.9	-7.03	415.0	-157.3	-6.73	ZZ
FPW8RB		608.8	38.4	1.60	582.7	10.4	0.44	ZZ
FRV44E		591.5	21.1	0.88	583.5	11.2	0.48	ZZ
FUWCT		590.5	20.1	0.84	605.5	33.2	1.42	ZZ
FX7GE4		547.0	-23.4	-0.97	554.5	-17.8	-0.76	ZZ
GMUGE		545.0	-25.4	-1.06	562.5	-9.8	-0.42	ZZ
H4VYKL		555.5	-14.9	-0.62	563.5	-8.8	-0.38	ZZ
HQ9FGF	*	500.5	-69.9	-2.91	518.5	-53.8	-2.30	ZZ
HZJAXB		567.5	-2.9	-0.12	557.5	-14.8	-0.63	ZZ
J3W3LA		592.5	22.1	0.92	616.0	43.7	1.87	ZZ
J7N3AX		550.0	-20.4	-0.85	557.5	-14.8	-0.63	ZZ
JBVUNW		571.5	1.1	0.05	560.0	-12.3	-0.53	ZZ
JFTPNP		533.0	-37.4	-1.56	548.5	-23.8	-1.02	ZZ
JTJZC2		600.5	30.1	1.25	605.0	32.7	1.40	ZZ
JYEQX8		564.5	-5.9	-0.24	568.0	-4.3	-0.19	ZZ
JZTBQH	*	573.5	3.1	0.13	539.0	-33.3	-1.43	ZZ
K78KCP		587.5	17.1	0.71	588.5	16.2	0.69	ZZ
KAVXA2		557.8	-12.6	-0.53	567.2	-5.1	-0.22	ZZ
LUH87E		594.0	23.7	0.99	607.6	35.3	1.51	ZZ
LVXQ4H		571.5	1.1	0.05	585.5	13.2	0.56	ZZ
M8UTJV		585.5	15.1	0.63	580.5	8.2	0.35	ZZ
M9JCYC		563.5	-6.9	-0.29	561.5	-10.8	-0.46	ZZ
MLUMY		591.5	21.1	0.88	574.0	1.7	0.07	ZZ
MN6M2Y		586.0	15.6	0.65	579.5	7.2	0.31	ZZ
MPB7LL	M	No data reported for this sample			547.5	-24.8	-1.06	ZZ
MYCPRV		552.0	-18.4	-0.77	569.5	-2.8	-0.12	ZZ
MYEMG		595.5	25.1	1.05	584.5	12.2	0.52	ZZ
NKEVEV		578.5	8.1	0.34	572.0	-0.3	-0.01	ZZ
P893GE		566.0	-4.4	-0.18	546.0	-26.3	-1.13	ZZ
PVC2XL		617.1	46.7	1.95	611.3	39.0	1.67	ZZ
PWJBKW	X	757.0	186.6	7.77	772.5	200.2	8.56	ZZ

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
Q6H2BR		562.0	-8.4	-0.35	560.0	-12.3	-0.53	ZZ
QWA3K		548.5	-21.9	-0.91	559.0	-13.3	-0.57	ZZ
QWM4K		550.0	-20.4	-0.85	550.0	-22.3	-0.96	ZZ
QYF6CR	*	517.0	-53.4	-2.22	549.5	-22.8	-0.98	ZZ
RHGYGH		581.5	11.1	0.46	569.5	-2.8	-0.12	ZZ
RMMA2	*	621.9	51.5	2.14	639.6	67.2	2.88	ZZ
RXA7K6		574.0	3.6	0.15	556.5	-15.8	-0.68	ZZ
TGQ9YA		555.0	-15.4	-0.64	537.5	-34.8	-1.49	ZZ
TL4ZDF		580.0	9.6	0.40	575.5	3.2	0.14	ZZ
U8DVJL		585.5	15.1	0.63	589.0	16.7	0.71	ZZ
U93DAK		559.5	-10.9	-0.45	593.5	21.2	0.91	ZZ
UKJJK9		569.9	-0.5	-0.02	570.9	-1.4	-0.06	ZZ
UN73YD		559.5	-10.9	-0.45	567.0	-5.3	-0.23	ZZ
UPFCM4		586.5	16.1	0.67	605.0	32.7	1.40	ZZ
V26DWJ		586.0	15.6	0.65	584.5	12.2	0.52	ZZ
V3ARMQ		595.6	25.3	1.05	613.2	40.8	1.75	ZZ
VBPGBN		591.1	20.7	0.86	593.9	21.5	0.92	ZZ
VW9GM		596.0	25.6	1.07	594.5	22.2	0.95	ZZ
VZ7XXL		586.0	15.6	0.65	580.0	7.7	0.33	ZZ
WV4GX		572.5	2.1	0.09	541.5	-30.8	-1.32	ZZ
XKPUGA		519.5	-50.9	-2.12	534.0	-38.3	-1.64	ZZ
XLGRRU		584.0	13.6	0.57	600.5	28.2	1.21	ZZ
XU6RZT		563.0	-7.4	-0.31	558.0	-14.3	-0.61	ZZ
XV6L3X		599.0	28.6	1.19	567.5	-4.8	-0.21	ZZ
XV96AA		545.0	-25.4	-1.06	554.0	-18.3	-0.78	ZZ
YA4TTM		612.0	41.6	1.73	609.0	36.7	1.57	ZZ
YY4T99		560.2	-10.2	-0.42	564.3	-8.0	-0.34	ZZ
ZKRLXM		598.2	27.8	1.16	589.1	16.7	0.72	ZZ
ZR3C4F		567.5	-2.9	-0.12	571.0	-1.3	-0.06	ZZ
ZWBM6F		569.0	-1.4	-0.06	552.0	-20.3	-0.87	ZZ
ZZ8BK3		590.0	19.6	0.82	584.0	11.7	0.50	ZZ

Analysis 606

Ultimate Elongation (percent)

		Summary Statistics	
Grand Means	570.37 percent		572.32 percent
Std Dev Btwn Labs	24.01 percent		23.38 percent
Statistics based on 95 of 101 reporting participants			

Samples D91-D92: Polyisoprene compound, batch #1 & D93-D94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #606

4AVDJT (X) - Data for all Samples are low.

84N96Y (X) - Inconsistency in testing between Sample sets. Data for Sample D93 are low.

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

FE8E9Z (X) - Data for all Samples are low.

MPB7LL (M) - Data not reported for Sample set D91-D92.

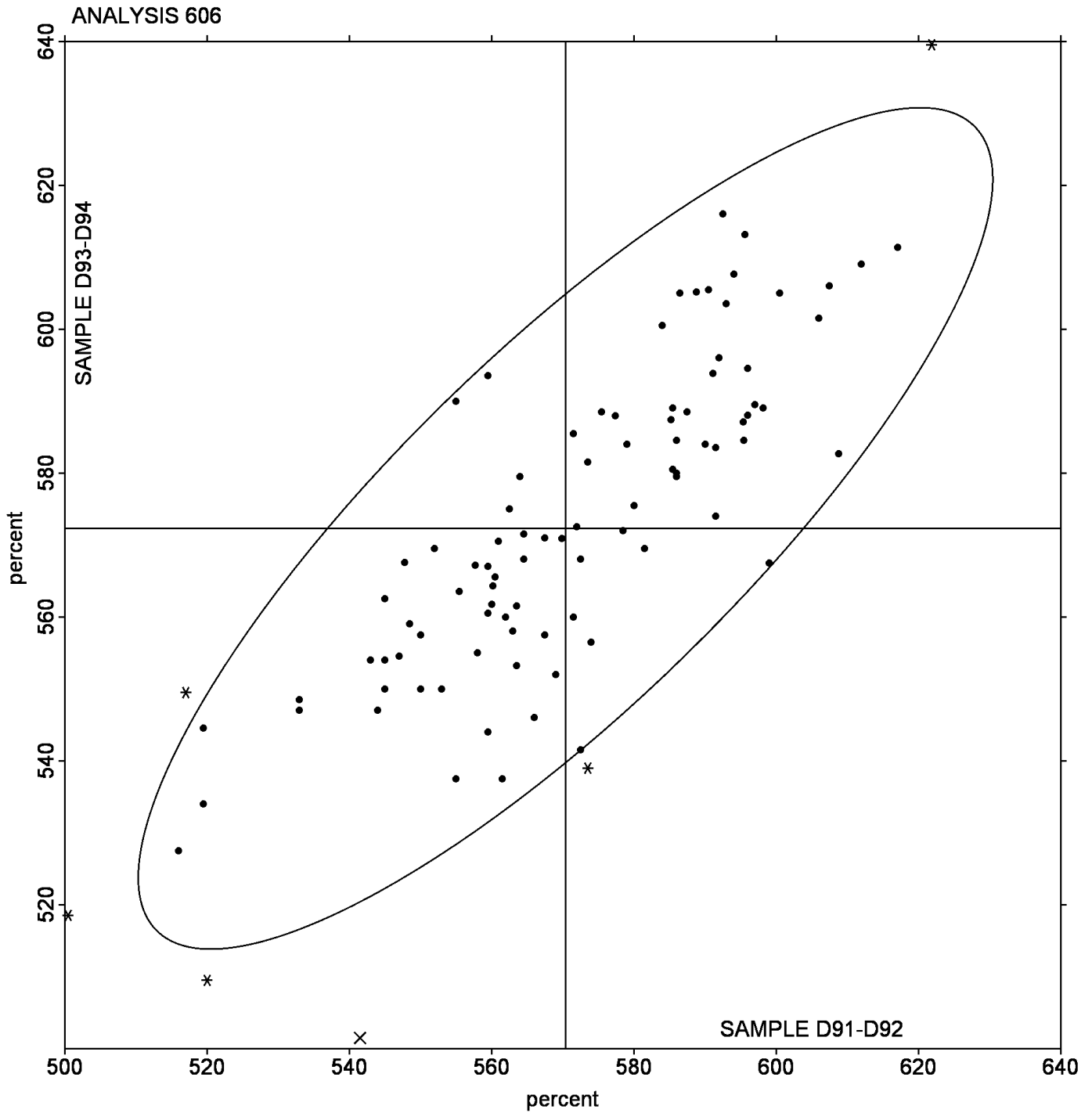
PWJBKW (X) - Data for all Samples are high.

Analysis 606

Ultimate Elongation (percent)

Grand Mean Sample D91-D92 = 570.37 percent

Grand Mean Sample D93-D94 = 572.32 percent



Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22MUFM	*	1,065.7	-98.6	-1.40	1,154.2	-4.2	-0.06	ZZ
26682U		1,113.2	-51.1	-0.73	1,200.2	41.9	0.63	ZZ
26Y33H		1,310.2	145.9	2.07	1,238.7	80.4	1.20	ZZ
2PHK3W	X	86,564.1	185,399.8	16,846.11	198,819.9	197,661.5	17,928.43	ZZ
2ZNXHB	X	1,031.2	-133.1	-1.89	931.6	-226.7	-3.39	ZZ
3K3ZKM		1,095.0	-69.2	-0.98	1,124.1	-34.3	-0.51	ZZ
3TM34B		1,130.0	-34.2	-0.49	1,079.5	-78.8	-1.18	ZZ
4Q6K6V	M	No data reported for this sample			1,142.5	-15.8	-0.24	ZZ
6RZC6B		1,190.0	25.8	0.37	1,151.0	-7.3	-0.11	ZZ
76C88Y		1,056.0	-108.2	-1.54	1,100.5	-57.8	-0.87	ZZ
77LWFW		1,255.5	91.3	1.30	1,254.5	96.2	1.44	ZZ
79VT8D		1,206.1	41.8	0.59	1,187.9	29.6	0.44	ZZ
7AAQNP		1,022.5	-141.7	-2.01	1,083.0	-75.3	-1.13	ZZ
7CCPLB		1,174.0	9.8	0.14	1,162.5	4.2	0.06	ZZ
7PL8PX		1,157.5	-6.7	-0.10	1,090.0	-68.3	-1.02	ZZ
7UXU8N		1,274.5	110.3	1.57	1,298.5	140.2	2.10	ZZ
7Y3ADK		1,162.5	-1.7	-0.02	1,189.0	30.7	0.46	ZZ
8DDQTD		1,118.5	-45.7	-0.65	1,117.0	-41.3	-0.62	ZZ
8F97JH		1,070.5	-93.7	-1.33	1,067.0	-91.3	-1.37	ZZ
8M6K6X		1,209.0	44.8	0.64	1,189.5	31.2	0.47	ZZ
8UAZVC		1,188.5	24.3	0.34	1,178.0	19.7	0.29	ZZ
8XK4F2	X	1,415.0	250.8	3.56	1,455.5	297.2	4.45	ZZ
98PH47		1,149.2	-15.0	-0.21	1,105.4	-52.9	-0.79	ZZ
9HNB2D		1,104.0	-60.2	-0.86	1,065.0	-93.3	-1.40	ZZ
A6JT6P		1,144.0	-20.2	-0.29	1,107.0	-51.3	-0.77	ZZ
AFPJCH		1,042.1	-122.1	-1.74	1,065.2	-93.1	-1.39	ZZ
AJL8Q4		1,194.6	30.3	0.43	1,141.3	-17.1	-0.26	ZZ
B3F44R		1,237.5	73.3	1.04	1,151.5	-6.8	-0.10	ZZ
BNEK3U		1,126.0	-38.2	-0.54	1,138.5	-19.8	-0.30	ZZ
BRAMD		1,070.4	-93.9	-1.33	1,070.4	-87.9	-1.32	ZZ
D3UC2D		1,110.5	-53.7	-0.76	1,103.0	-55.3	-0.83	ZZ
EBVCHX		1,168.3	4.0	0.06	1,118.3	-40.0	-0.60	ZZ
EN66Z4	*	986.5	-177.7	-2.53	992.5	-165.8	-2.48	ZZ
ENVL2U	X	1,407.0	242.8	3.45	1,434.0	275.7	4.13	ZZ
ERB8L2		1,144.0	-20.2	-0.29	1,139.5	-18.8	-0.28	ZZ

Rubber Interlaboratory Testing Program

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
EXQXJM		1,202.5	38.3	0.54	1,232.5	74.2	1.11	ZZ
EZY9TV		1,054.0	-110.2	-1.57	1,047.5	-110.8	-1.66	ZZ
FBVPQD		1,260.5	96.3	1.37	1,232.0	73.7	1.10	ZZ
FJLCD2		1,283.0	118.8	1.69	1,224.0	65.7	0.98	ZZ
FLLLDJ		1,132.2	-32.0	-0.46	1,064.8	-93.5	-1.40	ZZ
FUXNMR		1,197.0	32.8	0.47	1,190.5	32.2	0.48	ZZ
GZ2EL4		1,171.6	7.4	0.10	1,167.0	8.7	0.13	ZZ
H3JVE9		1,116.8	-47.4	-0.67	1,145.8	-12.5	-0.19	ZZ
H3QML4	X	920.9	-243.3	-3.46	861.8	-296.6	-4.44	ZZ
H9DDUR		1,272.7	108.5	1.54	1,290.1	131.8	1.97	ZZ
H9L9W6		1,213.7	49.5	0.70	1,171.4	13.0	0.20	ZZ
HGR79V		1,185.5	21.3	0.30	1,197.5	39.2	0.59	ZZ
HUBZFG		1,214.0	49.8	0.71	1,196.0	37.7	0.56	ZZ
J8CGNN		1,232.8	68.6	0.97	1,180.6	22.3	0.33	ZZ
J9NNTJ		1,220.5	56.3	0.80	1,246.6	88.3	1.32	ZZ
JCGFED		1,106.6	-57.6	-0.82	1,121.9	-36.4	-0.55	ZZ
JRZV4W	X	1,606.0	441.8	6.28	1,442.5	284.2	4.25	ZZ
KB3CKL		1,219.8	55.5	0.79	1,212.5	54.2	0.81	ZZ
L2AEFY		1,099.0	-65.2	-0.93	1,103.5	-54.8	-0.82	ZZ
L3CEWW		1,245.5	81.3	1.15	1,234.0	75.7	1.13	ZZ
L6VEWM		1,171.9	7.7	0.11	1,198.0	39.7	0.59	ZZ
LHKDNP		1,177.7	13.5	0.19	1,218.3	60.0	0.90	ZZ
LWKXZR		1,006.6	-157.7	-2.24	1,042.8	-115.5	-1.73	ZZ
M6RZFR		1,135.0	-29.2	-0.42	1,153.5	-4.8	-0.07	ZZ
M7VQEY	X	290.0	-874.2	-12.42	282.0	-876.3	-13.12	ZZ
M92DMX		1,094.0	-70.2	-1.00	1,088.5	-69.8	-1.05	ZZ
MKXR2V		1,251.0	86.8	1.23	1,244.5	86.2	1.29	ZZ
MMLMY		1,209.5	45.3	0.64	1,157.5	-0.8	-0.01	ZZ
N32YA4		1,207.0	42.8	0.61	1,261.0	102.7	1.54	ZZ
NDEDXV		1,156.7	-7.6	-0.11	1,162.5	4.2	0.06	ZZ
NE82KX		1,133.5	-30.7	-0.44	1,170.0	11.7	0.17	ZZ
P3FUFU		1,267.6	103.4	1.47	1,185.7	27.4	0.41	ZZ
PT8CH4		1,193.3	29.1	0.41	1,182.5	24.1	0.36	ZZ
PT8F7E		1,163.9	-0.3	0.00	1,109.5	-48.8	-0.73	ZZ
PXK3UR		1,168.5	4.3	0.06	1,123.0	-35.3	-0.53	ZZ

Analysis 607

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
QA7VM8		1,162.5	-1.7	-0.02	1,178.0	19.7	0.29	ZZ
QFGQXU		1,182.0	17.8	0.25	1,214.0	55.7	0.83	ZZ
QW8YPQ		1,089.2	-75.0	-1.07	1,087.1	-71.2	-1.07	ZZ
R4NQVH		1,182.5	18.3	0.26	1,177.0	18.7	0.28	ZZ
RBVM7G		1,078.5	-85.7	-1.22	1,065.5	-92.8	-1.39	ZZ
RWP63M		1,114.5	-49.7	-0.71	1,126.0	-32.3	-0.48	ZZ
TPY4Y4		1,191.5	27.3	0.39	1,196.5	38.2	0.57	ZZ
TTG9Z7	*	1,365.5	201.3	2.86	1,361.9	203.6	3.05	ZZ
TW4UQ8		1,306.5	142.3	2.02	1,284.5	126.2	1.89	ZZ
UH3G8F		1,235.5	71.3	1.01	1,225.0	66.7	1.00	ZZ
UWTRV		1,090.7	-73.5	-1.05	1,070.4	-87.9	-1.32	ZZ
VEJAET		1,189.0	24.8	0.35	1,199.5	41.2	0.62	ZZ
VH3BMK		1,212.5	48.3	0.69	1,235.8	77.4	1.16	ZZ
VH9LL6		1,184.0	19.8	0.28	1,181.0	22.7	0.34	ZZ
VLEGPK	X	2,359.5	1,195.3	16.99	2,385.0	1,226.7	18.36	ZZ
VVEZVV		1,150.0	-14.2	-0.20	1,185.5	27.2	0.41	ZZ
WQ4Q7T		1,062.1	-102.1	-1.45	1,024.2	-134.1	-2.01	ZZ
WZ7B7Z		1,155.5	-8.7	-0.12	1,172.5	14.2	0.21	ZZ
XA4RV2		1,184.5	20.3	0.29	1,184.0	25.7	0.38	ZZ
XAV69M		1,099.4	-64.8	-0.92	1,133.5	-24.8	-0.37	ZZ
XHLVM2	*	1,198.5	34.3	0.49	1,080.5	-77.8	-1.16	ZZ
XPP9NC		1,096.5	-67.7	-0.96	1,157.5	-0.8	-0.01	ZZ
Y48DJD		1,193.5	29.3	0.42	1,196.0	37.7	0.56	ZZ
YCKCGV	X	1,387.0	222.8	3.17	1,419.5	261.2	3.91	ZZ
YEZTCV		1,164.5	0.3	0.00	1,168.0	9.7	0.15	ZZ
ZHCV9K		1,178.0	13.8	0.20	1,127.0	-31.3	-0.47	ZZ
ZHV4JE		1,175.0	10.8	0.15	1,142.5	-15.8	-0.24	ZZ
ZZPKBH		1,171.2	6.9	0.10	1,140.0	-18.3	-0.27	ZZ

Summary Statistics

Grand Means

1,164.24 psi

1,158.31 psi

Std Dev Btwn Labs

70.37 psi

66.80 psi

Statistics based on 88 of 98 reporting participants

Analysis 607

Stress at 300% Elongation (psi)

		Summary Statistics in SI Units	
Grand Means	8.0271 MPa	7.99	MPa
Stnd Dev Btwn Labs	0.4852 MPa	0.46	MPa
Statistics based on 88 of 98 reporting participants			

Samples D91-D92: Polyisoprene compound, batch #1 & D93-D94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #607

2PHK3W (X) - Extreme data for both Sample sets.

2ZNXHB (X) - Inconsistency in testing between Sample sets. Data for Sample set D93-D94 are low.

4Q6K6V (M) - Data not reported for Sample set D91-D92.

8XK4F2 (X) - Data for all Samples are high. Possible Systematic Error.

ENVL2U (X) - Data for all Samples are high. Possible Systematic Error.

H3QML4 (X) - Data for all Samples are low.

JRZV4W (X) - Data for all Samples are high. Also inconsistent in testing within both sample sets.

M7VQEY (X) - Extreme data for both Sample sets.

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

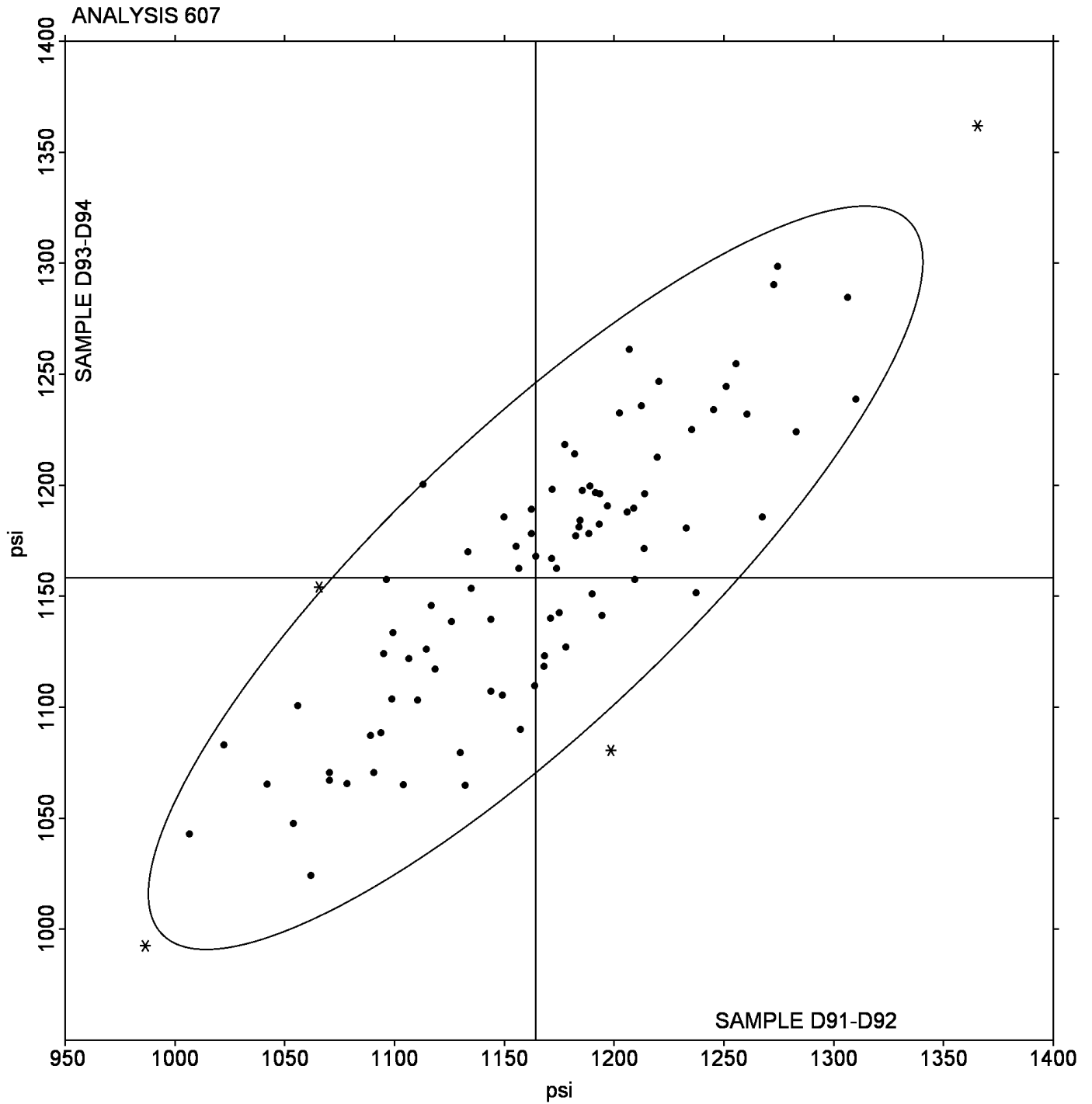
YCKCGV (X) - Data for all Samples are high. Possible Systematic Error.

Analysis 607

Stress at 300% Elongation (psi)

Grand Mean Sample D91-D92 = 1,164.24 psi

Grand Mean Sample D93-D94 = 1,158.31 psi



Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
27QUGA		219.0	-26.6	-1.74	218.5	-25.6	-1.74	ZZ
34QZFC		217.6	-28.1	-1.83	225.5	-18.6	-1.26	ZZ
3Y4GP4		236.5	-9.1	-0.60	245.0	0.9	0.06	ZZ
4PUHHW	M	No data reported for this sample			241.0	-3.1	-0.21	ZZ
64ZT6B		224.8	-20.8	-1.36	239.3	-4.8	-0.33	ZZ
6J68ZN		259.5	13.9	0.91	248.5	4.4	0.30	ZZ
6LHCUB		242.5	-3.1	-0.20	237.5	-6.6	-0.45	ZZ
7363FV		244.0	-1.6	-0.11	247.0	2.9	0.19	ZZ
8TJBVC		225.0	-20.6	-1.35	223.5	-20.6	-1.40	ZZ
94P787		241.6	-4.0	-0.26	227.4	-16.8	-1.14	ZZ
986MFR		249.5	3.9	0.25	242.5	-1.6	-0.11	ZZ
9AX4XK		260.0	14.4	0.94	251.0	6.9	0.46	ZZ
9CBL7G		255.0	9.4	0.61	247.5	3.4	0.23	ZZ
9E7ZD8	X	333.0	87.4	5.71	321.5	77.4	5.25	ZZ
9GDYC2		249.5	3.9	0.25	260.3	16.2	1.10	ZZ
9K6UPL	*	283.5	37.9	2.47	288.5	44.4	3.01	ZZ
AA4GED		246.5	0.9	0.06	247.0	2.9	0.19	ZZ
AP9JNZ		256.5	10.9	0.71	259.5	15.4	1.04	ZZ
ARCTJX		242.0	-3.6	-0.24	242.0	-2.1	-0.15	ZZ
AYK7QU		238.0	-7.6	-0.50	227.0	-17.1	-1.16	ZZ
B48HWA		230.5	-15.1	-0.99	225.0	-19.1	-1.30	ZZ
B4JU9G		252.5	6.9	0.45	259.5	15.4	1.04	ZZ
BMCJQM		274.8	29.2	1.91	279.9	35.8	2.43	ZZ
BRC992		244.6	-1.0	-0.06	238.1	-6.0	-0.41	ZZ
CD3TPR		245.8	0.2	0.02	251.6	7.5	0.51	ZZ
CE8C2K		224.8	-20.8	-1.36	232.8	-11.4	-0.77	ZZ
CFLAHW		239.3	-6.3	-0.41	247.3	3.1	0.21	ZZ
CPM4MA		235.0	-10.6	-0.70	228.4	-15.7	-1.07	ZZ
CUNB6T		240.8	-4.8	-0.32	227.0	-17.2	-1.16	ZZ
CXW988		263.4	17.7	1.16	268.5	24.3	1.65	ZZ
D2KBFE		230.0	-15.6	-1.02	231.0	-13.1	-0.89	ZZ
DHNZCC		238.1	-7.5	-0.49	251.3	7.1	0.48	ZZ
DNCGQF		224.0	-21.6	-1.41	231.8	-12.3	-0.83	ZZ
DVT2RA	X	202.6	-43.0	-2.81	192.1	-52.1	-3.53	ZZ
EADUF7		251.2	5.6	0.37	255.5	11.4	0.77	ZZ

Rubber Interlaboratory Testing Program

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
F7X9CW	X	122.5	-123.1	-8.04	120.5	-123.6	-8.39	ZZ
FAZ2EA		232.1	-13.5	-0.89	239.3	-4.8	-0.33	ZZ
FCTYX3		254.0	8.4	0.55	238.5	-5.6	-0.38	ZZ
FE4HFB		247.5	1.9	0.12	233.5	-10.6	-0.72	ZZ
FHPTNV		262.0	16.4	1.07	257.8	13.7	0.93	ZZ
FHUAXF		211.5	-34.1	-2.23	222.0	-22.1	-1.50	ZZ
FR7BN9		280.0	34.4	2.25	278.5	34.4	2.33	ZZ
FYUU4V		256.0	10.4	0.68	244.0	-0.1	-0.01	ZZ
G6PCJ6		233.0	-12.6	-0.82	238.0	-6.1	-0.42	ZZ
GKBV38		240.5	-5.2	-0.34	237.8	-6.4	-0.43	ZZ
GP8HYG		250.5	4.9	0.32	249.0	4.9	0.33	ZZ
GPXCYZ		245.5	-0.1	-0.01	235.5	-8.6	-0.59	ZZ
GU7MZZ		251.5	5.9	0.38	250.3	6.1	0.41	ZZ
H7ZHTD		252.4	6.8	0.44	249.5	5.3	0.36	ZZ
HN7LRB		268.5	22.9	1.50	269.5	25.4	1.72	ZZ
HNBFTB		251.5	5.9	0.38	241.6	-2.6	-0.17	ZZ
JF3ZNN		266.9	21.3	1.39	252.0	7.9	0.53	ZZ
K67WCE		221.9	-23.7	-1.55	224.1	-20.1	-1.36	ZZ
KFKBCP	*	278.0	32.4	2.12	288.5	44.4	3.01	ZZ
LDAUF4		258.5	12.8	0.84	253.6	9.5	0.64	ZZ
LGWWQ		265.0	19.4	1.27	244.5	0.4	0.02	ZZ
LHWRTQ	*	206.2	-39.4	-2.57	199.1	-45.0	-3.05	ZZ
LJWQ7X		265.4	19.8	1.29	249.5	5.3	0.36	ZZ
MBUWF		238.0	-7.6	-0.50	228.0	-16.1	-1.10	ZZ
MJQREB		248.0	2.4	0.16	250.5	6.4	0.43	ZZ
MKEDJQ		240.0	-5.6	-0.37	237.5	-6.6	-0.45	ZZ
NC4BBW		239.3	-6.3	-0.41	239.3	-4.8	-0.33	ZZ
NLVULR		226.9	-18.8	-1.23	223.1	-21.0	-1.43	ZZ
NX8JYF		226.5	-19.1	-1.25	230.0	-14.1	-0.96	ZZ
P72KVQ	*	216.5	-29.1	-1.90	234.0	-10.1	-0.69	ZZ
PEAB6V		233.5	-12.1	-0.79	241.5	-2.7	-0.18	ZZ
QAM6JC		269.5	23.9	1.56	248.0	3.9	0.26	ZZ
QNUDW		247.7	2.1	0.14	234.9	-9.3	-0.63	ZZ
QUXYM7		242.5	-3.1	-0.20	245.5	1.4	0.09	ZZ
QXCHJU		246.0	0.4	0.03	235.5	-8.6	-0.59	ZZ

Analysis 608

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
RA76FG	X	286.5	40.9	2.67	294.0	49.9	3.38	ZZ
RYYM9Q		251.5	5.9	0.38	251.0	6.9	0.46	ZZ
T4BTQK		258.5	12.9	0.84	264.5	20.4	1.38	ZZ
T64P8P		245.1	-0.5	-0.03	237.1	-7.0	-0.48	ZZ
TFN2GG		270.6	24.9	1.63	260.3	16.1	1.09	ZZ
TTX7TC		243.5	-2.1	-0.14	242.5	-1.6	-0.11	ZZ
TUWPY6		243.9	-1.7	-0.11	250.2	6.0	0.41	ZZ
U49GKR		244.5	-1.1	-0.07	245.0	0.9	0.06	ZZ
U6DE8F		238.5	-7.1	-0.46	248.5	4.4	0.30	ZZ
UR9ZA6		249.5	3.9	0.25	250.5	6.4	0.43	ZZ
V66YQM		234.2	-11.4	-0.74	239.3	-4.8	-0.33	ZZ
VZ739L		232.5	-13.1	-0.86	243.0	-1.1	-0.08	ZZ
WD4E4J	X	1,045.0	799.4	52.22	1,079.5	835.4	56.65	ZZ
WD8UU		242.0	-3.6	-0.24	249.0	4.9	0.33	ZZ
WY86NK		250.5	4.9	0.32	235.5	-8.6	-0.59	ZZ
XANQLT		232.5	-13.1	-0.86	240.0	-4.1	-0.28	ZZ
XDBLF8		235.0	-10.6	-0.69	239.0	-5.1	-0.35	ZZ
XE22EH		240.5	-5.1	-0.33	242.0	-2.1	-0.15	ZZ
XGBT26		267.0	21.4	1.40	263.5	19.4	1.31	ZZ
XGQVHJ		245.5	-0.1	-0.01	242.0	-2.1	-0.15	ZZ
XK33PH		269.9	24.3	1.59	258.0	13.9	0.94	ZZ
XWZN4Z		244.0	-1.6	-0.11	229.5	-14.6	-0.99	ZZ
YB2HGV		236.0	-9.6	-0.63	224.5	-19.6	-1.33	ZZ
YGVTVK		252.5	6.9	0.45	254.5	10.4	0.70	ZZ
YN4KL3		265.0	19.4	1.27	261.0	16.9	1.14	ZZ
YXD47L		249.5	3.9	0.25	256.0	11.9	0.80	ZZ
Z97TE9		255.3	9.7	0.63	242.2	-1.9	-0.13	ZZ
ZFBMGE		237.5	-8.1	-0.53	238.0	-6.1	-0.42	ZZ
ZY7NJR		248.5	2.9	0.19	250.0	5.9	0.40	ZZ

Grand Means

245.61 psi

Summary Statistics

244.15 psi

Std Dev Btwn Labs

15.31 psi

14.75 psi

Statistics based on 93 of 99 reporting participants

Analysis 608

Stress at 100% Elongation (psi)

		Summary Statistics in SI Units	
Grand Means	1.6934 MPa	1.68	MPa
Std Dev Btwn Labs	0.1056 MPa	0.10	MPa
Statistics based on 93 of 99 reporting participants			

Samples D91-D92: Polyisoprene compound, batch #1 & D93-D94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #608

4PUHHW (M) - Data not reported for Sample set D91-D92.

9E7ZD8 (X) - Data for all Samples are high.

DVT2RA (X) - Data for all Samples are low. Possible Systematic Error.

F7X9CW (X) - Data for all Samples are low.

RA76FG (X) - Inconsistency in testing between Sample sets. Data for Sample set D93-D94 are high.

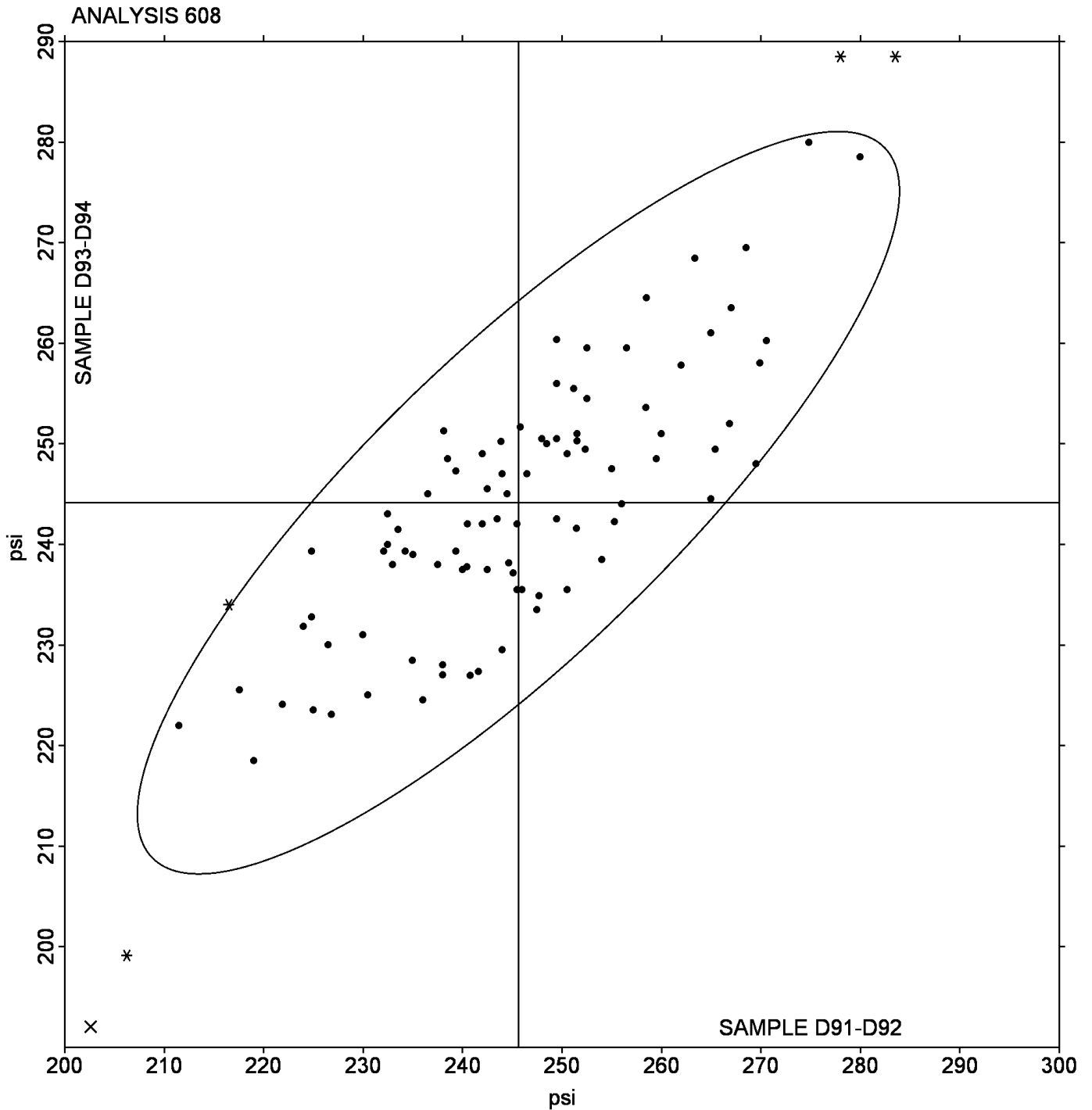
WD4E4J (X) - Data for all Samples are high. Also inconsistent in testing within Sample set D93-D94.

Analysis 608

Stress at 100% Elongation (psi)

Grand Mean Sample D91-D92 = 245.61 psi

Grand Mean Sample D93-D94 = 244.15 psi



Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
24TKED		52.25	-0.10	-0.06	52.05	-0.28	-0.17	ZZ
2B8CKD		52.00	-0.35	-0.21	53.00	0.67	0.41	ZZ
2KK69F		53.90	1.55	0.94	53.90	1.57	0.95	ZZ
2NVAT6		52.50	0.15	0.09	53.00	0.67	0.41	ZZ
2UKZ47		52.00	-0.35	-0.21	52.50	0.17	0.11	ZZ
377MGB	X	51.50	-0.85	-0.52	53.00	0.67	0.41	ZZ
3BM423		51.00	-1.35	-0.82	51.00	-1.33	-0.80	ZZ
3PGKUF		52.00	-0.35	-0.21	51.50	-0.83	-0.50	ZZ
3TGR6T		52.00	-0.35	-0.21	52.00	-0.33	-0.20	ZZ
48CGPF		52.50	0.15	0.09	52.65	0.32	0.20	ZZ
4NURNC		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
4W6KAK		52.50	0.15	0.09	52.40	0.07	0.04	ZZ
6JRUGB		52.50	0.15	0.09	52.50	0.17	0.11	ZZ
6RPAVG		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
6T3W3C		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
6Y2JTQ		56.00	3.65	2.22	56.00	3.67	2.23	ZZ
7VL9EM		51.30	-1.05	-0.64	51.90	-0.43	-0.26	ZZ
7VZFDU		49.00	-3.35	-2.03	49.50	-2.83	-1.71	ZZ
87UKW8		53.50	1.15	0.70	54.00	1.67	1.01	ZZ
8AFBD4		53.50	1.15	0.70	54.00	1.67	1.01	ZZ
9HR8U3		54.50	2.15	1.31	54.50	2.17	1.32	ZZ
9NVTJC		51.00	-1.35	-0.82	51.00	-1.33	-0.80	ZZ
9RPUH8		53.00	0.65	0.39	53.50	1.17	0.71	ZZ
9TGQUT		51.35	-1.00	-0.61	52.15	-0.18	-0.11	ZZ
9V2RPG		51.90	-0.45	-0.27	51.70	-0.63	-0.38	ZZ
9WRJ9T		53.50	1.15	0.70	53.50	1.17	0.71	ZZ
A8LRFH	*	47.50	-4.85	-2.94	48.00	-4.33	-2.62	ZZ
ARD9UP	*	52.25	-0.10	-0.06	51.00	-1.33	-0.80	ZZ
B7NVC7		52.00	-0.35	-0.21	51.50	-0.83	-0.50	ZZ
BGXH3Z		51.50	-0.85	-0.52	52.00	-0.33	-0.20	ZZ
BN3V6A	X	53.50	1.15	0.70	51.50	-0.83	-0.50	ZZ
BUNRQB	*	57.00	4.65	2.82	57.00	4.67	2.83	ZZ
C8KHT2		52.00	-0.35	-0.21	51.50	-0.83	-0.50	ZZ
CDWAFL		53.70	1.35	0.82	53.50	1.17	0.71	ZZ
CV4PDG		54.00	1.65	1.00	53.50	1.17	0.71	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
DEE64Z		52.80	0.45	0.27	52.60	0.27	0.17	ZZ
E3TXAX		52.00	-0.35	-0.21	52.00	-0.33	-0.20	ZZ
E6R9W6		52.50	0.15	0.09	52.00	-0.33	-0.20	ZZ
EAVUAX		53.50	1.15	0.70	53.00	0.67	0.41	ZZ
EHG8M8		52.75	0.40	0.24	52.25	-0.08	-0.05	ZZ
EQPPAE		51.50	-0.85	-0.52	51.50	-0.83	-0.50	ZZ
FHQ6L6		52.50	0.15	0.09	52.50	0.17	0.11	ZZ
FMEULH		53.25	0.90	0.55	53.00	0.67	0.41	ZZ
FNWFCH	*	51.50	-0.85	-0.52	52.70	0.37	0.23	ZZ
FUJBW9		50.00	-2.35	-1.43	50.00	-2.33	-1.41	ZZ
G3N2X7		52.10	-0.25	-0.15	52.00	-0.33	-0.20	ZZ
G66KLE		54.50	2.15	1.31	54.00	1.67	1.01	ZZ
GLQAC3		55.70	3.35	2.03	55.15	2.82	1.71	ZZ
H67JQB		51.95	-0.40	-0.24	52.15	-0.18	-0.11	ZZ
HVR3E3		51.25	-1.10	-0.67	50.30	-2.03	-1.23	ZZ
J76Y3X		53.50	1.15	0.70	53.00	0.67	0.41	ZZ
JQ9CKP		50.50	-1.85	-1.12	50.00	-2.33	-1.41	ZZ
JR34AH		52.50	0.15	0.09	53.00	0.67	0.41	ZZ
JTFZBV		51.00	-1.35	-0.82	50.50	-1.83	-1.11	ZZ
JZVEJD		51.00	-1.35	-0.82	51.15	-1.18	-0.71	ZZ
K8AMKF		55.30	2.95	1.79	55.55	3.22	1.95	ZZ
KMC38U		54.00	1.65	1.00	54.00	1.67	1.01	ZZ
KYRT7P		52.00	-0.35	-0.21	52.00	-0.33	-0.20	ZZ
LF6QJB		51.75	-0.60	-0.36	52.00	-0.33	-0.20	ZZ
M3983H		51.30	-1.05	-0.64	50.80	-1.53	-0.92	ZZ
MLZXYQ		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
MQCBPH		53.10	0.75	0.46	52.10	-0.23	-0.14	ZZ
NCVP6F		52.35	0.00	0.00	52.70	0.37	0.23	ZZ
NECPVC		54.50	2.15	1.31	55.00	2.67	1.62	ZZ
NMG4D7		51.50	-0.85	-0.52	52.00	-0.33	-0.20	ZZ
NX3TBY		53.50	1.15	0.70	53.50	1.17	0.71	ZZ
P62JLZ		53.50	1.15	0.70	53.50	1.17	0.71	ZZ
PBP9ZH		51.50	-0.85	-0.52	51.80	-0.53	-0.32	ZZ
PBU23J		51.80	-0.55	-0.33	51.95	-0.38	-0.23	ZZ
PH8DUB	*	48.00	-4.35	-2.64	47.50	-4.83	-2.92	ZZ

Rubber Interlaboratory Testing Program

Analysis 620

Hardness (Shore A/Type A)

WebCode	Data Flag	Sample D91-D92			Sample D93-D94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
PJGNM2		49.35	-3.00	-1.82	49.50	-2.83	-1.71	ZZ
PMN2N2		53.70	1.35	0.82	54.15	1.82	1.10	ZZ
PQGBCF		52.00	-0.35	-0.21	52.00	-0.33	-0.20	ZZ
PWFTEK	X	48.55	-3.80	-2.31	50.80	-1.53	-0.92	ZZ
QUYT4R		51.50	-0.85	-0.52	51.50	-0.83	-0.50	ZZ
QW3GX		51.10	-1.25	-0.76	50.95	-1.38	-0.83	ZZ
R2C4XC		51.00	-1.35	-0.82	50.00	-2.33	-1.41	ZZ
R4R93U		53.25	0.90	0.55	53.05	0.72	0.44	ZZ
R4VA7L		50.00	-2.35	-1.43	50.50	-1.83	-1.11	ZZ
RB4WM3		54.00	1.65	1.00	53.50	1.17	0.71	ZZ
T9296H		52.55	0.20	0.12	52.80	0.47	0.29	ZZ
TFQJMT		52.65	0.30	0.18	52.05	-0.28	-0.17	ZZ
U46YDG		52.25	-0.10	-0.06	51.95	-0.38	-0.23	ZZ
U7K233		50.95	-1.40	-0.85	51.00	-1.33	-0.80	ZZ
UL2FBZ		53.50	1.15	0.70	53.00	0.67	0.41	ZZ
UL9GLZ		55.15	2.80	1.70	55.05	2.72	1.65	ZZ
UX78FM		53.10	0.75	0.46	53.20	0.87	0.53	ZZ
VFZHFF		52.00	-0.35	-0.21	52.50	0.17	0.11	ZZ
VG74VU		49.15	-3.20	-1.94	49.30	-3.03	-1.83	ZZ
VNBR4N		52.00	-0.35	-0.21	52.00	-0.33	-0.20	ZZ
VQGA3G		50.00	-2.35	-1.43	50.00	-2.33	-1.41	ZZ
WJEFNH		50.00	-2.35	-1.43	50.00	-2.33	-1.41	ZZ
WUHWT		54.00	1.65	1.00	54.00	1.67	1.01	ZZ
XBPZP7		53.75	1.40	0.85	53.20	0.87	0.53	ZZ
XRRQG9		54.00	1.65	1.00	53.00	0.67	0.41	ZZ
XT6AP4		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
XV2YRJ		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
XX6UXF		52.50	0.15	0.09	53.00	0.67	0.41	ZZ
YV38CG		51.00	-1.35	-0.82	52.00	-0.33	-0.20	ZZ
Z9QRB4		55.90	3.55	2.15	55.95	3.62	2.20	ZZ
ZGH3NK		51.00	-1.35	-0.82	51.00	-1.33	-0.80	ZZ
ZL2E6F		53.00	0.65	0.39	53.00	0.67	0.41	ZZ
ZMB8E4	*	48.50	-3.85	-2.34	48.00	-4.33	-2.62	ZZ

Analysis 620

Hardness (Shore A/Type A)

Summary Statistics

Grand Means

52.349 Type A

52.326 Type A

Std Dev Btwn Labs

1.648 Type A

1.651 Type A

Statistics based on 100 of 103 reporting participants

Samples D91-D92: Polyisoprene compound, batch #1 & D93-D94: Polyisoprene compound, batch #2

Comments on assigned Data Flags for Test #620

377MGB (X) - Inconsistency in testing between Sample sets.

BN3V6A (X) - Inconsistency in testing between Sample sets.

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

Results by Reading Time (as reported by laboratory)

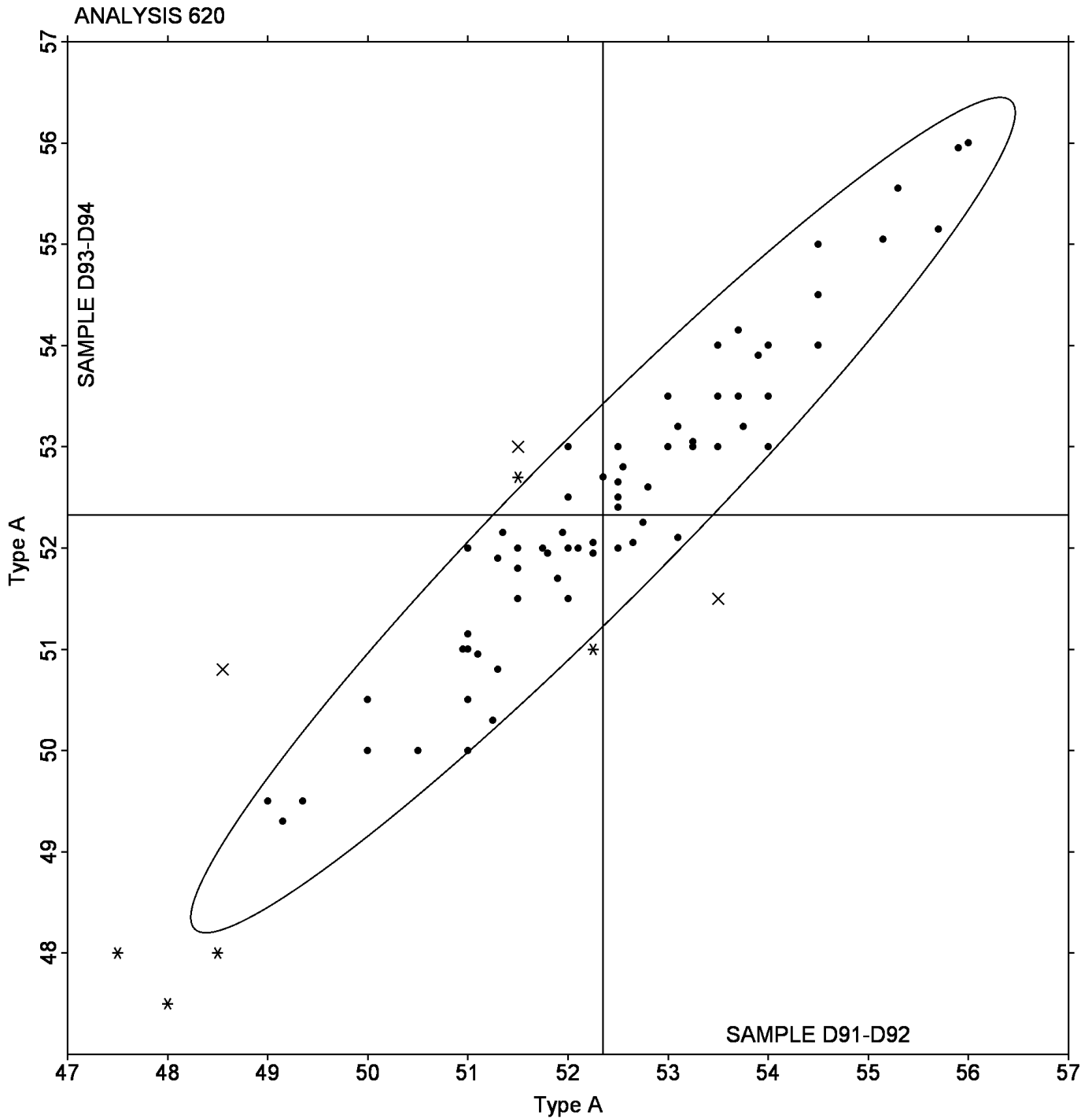
Reading Time	Sample D91 <i>Polyisoprene compound, batch #1</i>			Sample D92 <i>Polyisoprene compound, batch #1</i>			Labs Incl / Rpt	
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM		
Select from list below	52.40	0.85	0.05	52.48	0.74	0.15	2	2
Readings taken within 0 - 5 second	52.53	1.42	0.19	52.49	1.39	0.17	70	73
Readings taken at 5 seconds	52.17	1.74	-0.18	52.34	1.72	0.01	11	12
Readings taken after 5+ seconds	52.18	1.27	-0.17	52.11	1.37	-0.22	5	7
Maximum hardness indicator used	52.20	1.37	-0.15	52.11	1.50	-0.22	6	9

Analysis 620

Hardness (Shore A/Type A)

Grand Mean Sample D91-D92 = 52.349 Type A

Grand Mean Sample D93-D94 = 52.326 Type A



Analysis 630

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

WebCode	Data Flag	Sample D91-D92			Sample M91-M92			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3FEC73		3,470.6	202.6	1.51	3,351.3	260.4	1.54	ZZ
469VRJ	*	2,938.2	-329.9	-2.45	2,712.0	-379.0	-2.25	ZZ
6BP6J7		3,063.5	-204.5	-1.52	2,687.5	-403.4	-2.39	ZZ
6CPHM8		3,191.5	-76.5	-0.57	3,160.0	69.1	0.41	ZZ
6NFF8H		3,473.7	205.7	1.53	3,068.3	-22.6	-0.13	ZZ
76MZFZ		3,327.5	59.5	0.44	3,163.0	72.1	0.43	ZZ
76WKQA		3,268.0	0.0	0.00	2,912.5	-178.4	-1.06	ZZ
8MPDRT	M	3,411.0	142.9	1.06	3,224.8	133.9	0.79	ZZ
9LJ2B4		3,308.4	40.3	0.30	3,099.7	8.8	0.05	ZZ
BGHUN		3,293.8	25.8	0.19	3,100.2	9.3	0.06	ZZ
ECZGR9		3,388.5	120.5	0.90	3,218.0	127.1	0.75	ZZ
EDZZ2U		3,177.5	-90.5	-0.67	3,032.5	-58.4	-0.35	ZZ
EVXAW		3,340.2	72.2	0.54	3,354.8	263.8	1.56	ZZ
FMGN43		3,436.5	168.5	1.25	3,355.0	264.1	1.57	ZZ
G6YKBE		3,234.5	-33.5	-0.25	2,868.5	-222.4	-1.32	ZZ
J2X442		3,285.6	17.6	0.13	3,229.4	138.5	0.82	ZZ
K7K6RT		3,211.5	-56.5	-0.42	3,142.5	51.6	0.31	ZZ
KYVBC2		3,388.1	120.1	0.89	3,031.1	-59.8	-0.35	ZZ
LWTJ7A		3,377.1	109.1	0.81	3,130.1	39.2	0.23	ZZ
NWLDJ		3,394.5	126.5	0.94	3,156.5	65.6	0.39	ZZ
P9UTBE		3,194.7	-73.3	-0.54	3,179.9	88.9	0.53	ZZ
QC784E		3,173.5	-94.5	-0.70	2,817.0	-273.9	-1.62	ZZ
QQ9LPU		3,488.4	220.4	1.64	3,079.3	-11.6	-0.07	ZZ
R8HMAP		3,101.5	-166.5	-1.24	2,952.0	-138.9	-0.82	ZZ
RDUXTQ		3,268.5	0.5	0.00	3,056.0	-34.9	-0.21	ZZ
UUVJ9H		3,042.1	-225.9	-1.68	3,086.6	-4.3	-0.03	ZZ
V98W2F		3,315.1	47.1	0.35	3,125.7	34.7	0.21	ZZ
WT9WKJ		3,245.0	-23.0	-0.17	3,145.0	54.1	0.32	ZZ
WWPUY		3,206.5	-61.5	-0.46	3,252.5	161.6	0.96	ZZ
ZPMD7J		3,168.0	-100.0	-0.74	3,169.5	78.6	0.47	ZZ

Analysis 630

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

Summary Statistics

Grand Means

3,268.02 psi

3,090.90 psi

Std Dev Btwn Labs

134.57 psi

168.64 psi

Statistics based on 29 of 30 reporting participants

Summary Statistics in SI Units

Grand Means

22.532 MPa

21.31 MPa

Std Dev Btwn Labs

0.928 MPa

1.16 MPa

Statistics based on 29 of 30 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #630

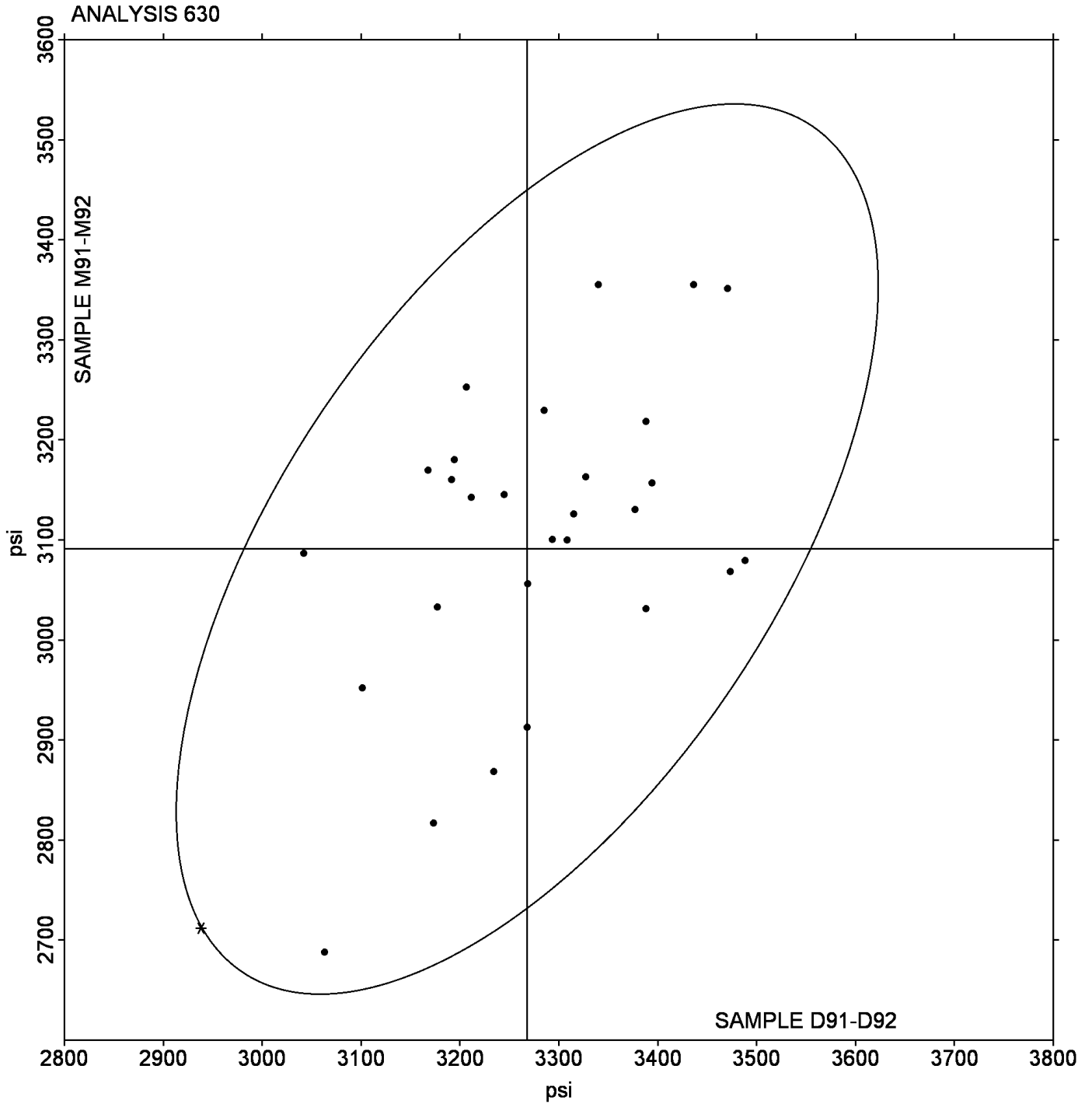
8MPDRT (M) - Data not reported for Sample set M92.

Analysis 630

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

Grand Mean Sample D91-D92 = 3,268.02 psi

Grand Mean Sample M91-M92 = 3,090.90 psi



Analysis 631

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

WebCode	Data Flag	Sample D91-D92			Sample M91-M92			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2GG29Z	M	594.0	19.9	0.83	579.9	25.8	0.97	ZZ
6VXT7J		595.6	21.5	0.90	590.2	36.1	1.36	ZZ
7W6LKF		584.0	9.8	0.41	546.0	-8.1	-0.30	ZZ
8C4VXF		574.0	-0.2	-0.01	534.0	-20.1	-0.75	ZZ
8MTXUN		571.5	-2.7	-0.11	548.0	-6.1	-0.23	ZZ
8VHP4A		562.5	-11.7	-0.49	542.5	-11.6	-0.43	ZZ
8X7JPC		612.0	37.8	1.58	585.0	30.9	1.16	ZZ
8ZCETU		586.5	12.3	0.51	599.5	45.4	1.70	ZZ
AA2Y93		587.5	13.3	0.56	575.5	21.4	0.80	ZZ
CA38TZ		577.4	3.2	0.14	556.0	1.9	0.07	ZZ
DHF6AY		520.0	-54.2	-2.26	504.5	-49.6	-1.86	ZZ
DRQGN8		608.8	34.6	1.44	583.7	29.7	1.11	ZZ
DUXH2U		567.5	-6.7	-0.28	531.5	-22.6	-0.85	ZZ
DXK7QY		572.5	-1.7	-0.07	540.5	-13.6	-0.51	ZZ
E4M23Q		586.0	11.8	0.49	558.0	3.9	0.15	ZZ
EWWXD		553.0	-21.2	-0.88	538.0	-16.1	-0.60	ZZ
HMKEM		588.8	14.6	0.61	574.3	20.2	0.76	ZZ
J4VZF4		585.3	11.1	0.46	560.4	6.3	0.24	ZZ
J6A47U	X	757.0	182.8	7.62	661.5	107.4	4.03	ZZ
M7QYAJ		595.5	21.3	0.89	557.5	3.4	0.13	ZZ
MUABQ		559.5	-14.7	-0.61	557.0	2.9	0.11	ZZ
QGHQ8K		533.0	-41.2	-1.72	531.0	-23.1	-0.87	ZZ
QHVMW		571.5	-2.7	-0.11	513.5	-40.6	-1.52	ZZ
QU92VW		600.5	26.3	1.10	579.5	25.4	0.95	ZZ
RNWAA		560.5	-13.6	-0.57	552.3	-1.8	-0.07	ZZ
TD2EPF		560.0	-14.2	-0.59	515.3	-38.8	-1.46	ZZ
VLWV7P		550.0	-24.2	-1.01	543.0	-11.1	-0.42	ZZ
Y4DEUD		547.0	-27.2	-1.13	546.5	-7.6	-0.28	ZZ
YUL62B		621.9	47.7	1.99	617.7	63.6	2.39	ZZ
ZP4CF9		544.0	-30.2	-1.26	533.5	-20.6	-0.77	ZZ

**Rubber Interlaboratory Testing Program
Analysis 631****Ultimate Elongation: Precured vs. Lab-Cured Samples (percent)**

		Summary Statistics	
Grand Means	574.15 percent		554.08 percent
Std Dev Btwn Labs	23.99 percent		26.66 percent
Statistics based on 28 of 30 reporting participants			

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #631

2GG29Z (M) - Data not reported for Sample set M92.

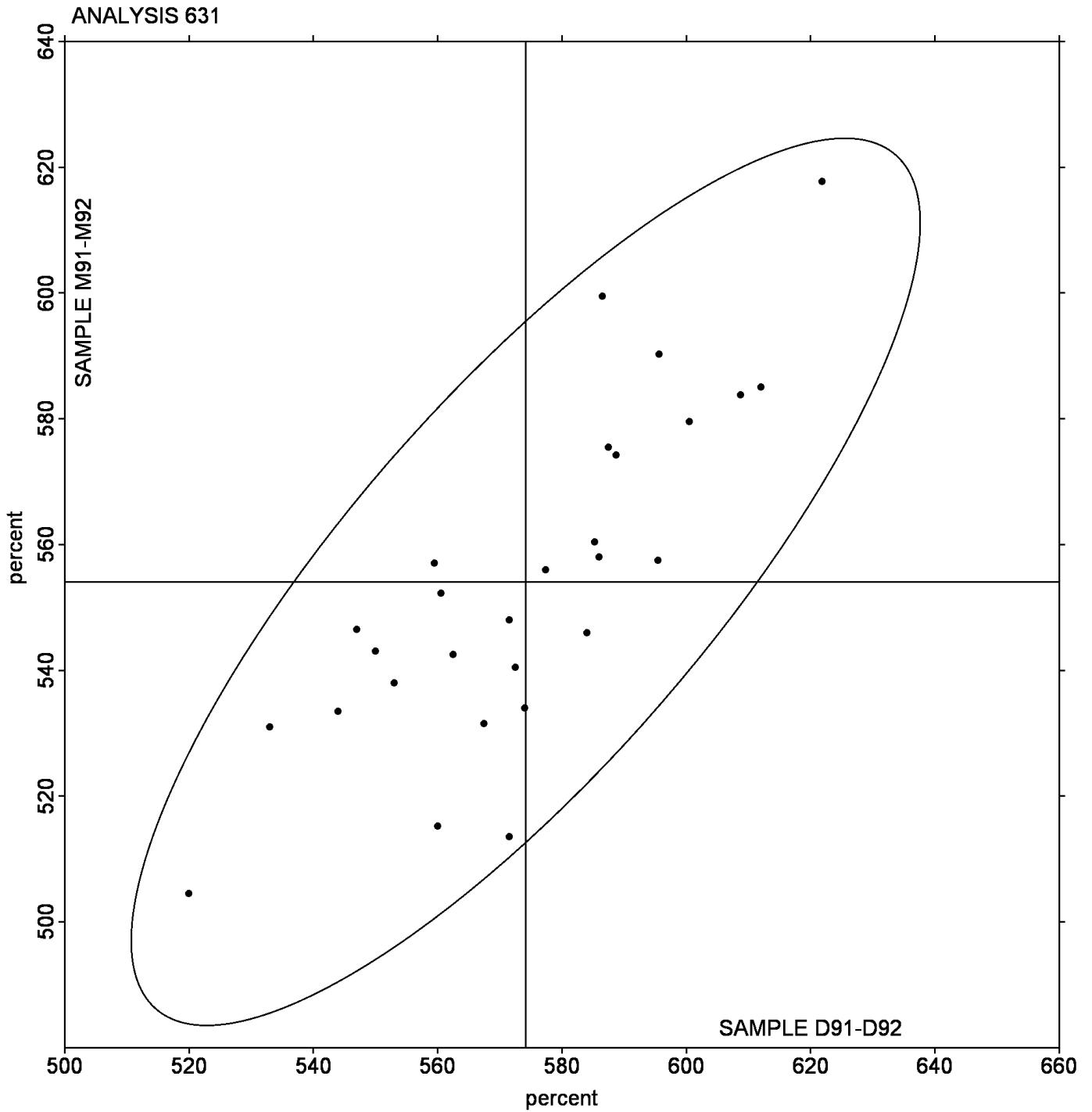
J6A47U (X) - Data for all Samples are high.

Analysis 631

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

Grand Mean Sample D91-D92 = 574.15 percent

Grand Mean Sample M91-M92 = 554.08 percent



Analysis 632

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

WebCode	Data Flag	Sample D91-D92			Sample M91-M92			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2HM6LB		1,310.2	152.9	1.65	1,294.8	64.4	0.49	ZZ
33K439		986.5	-170.7	-1.85	1,109.5	-120.9	-0.92	ZZ
68A8A4		1,219.8	62.5	0.68	1,359.0	128.6	0.97	ZZ
72D3FX		1,168.3	11.0	0.12	1,288.7	58.3	0.44	ZZ
94VR8F	*	920.9	-236.3	-2.56	934.0	-296.4	-2.25	ZZ
A72NC3		1,054.0	-103.2	-1.12	1,170.5	-59.9	-0.45	ZZ
B23MLL		1,126.0	-31.2	-0.34	1,085.5	-144.9	-1.10	ZZ
CG63NZ		1,272.7	115.5	1.25	1,449.2	218.8	1.66	ZZ
G9GKN8		1,193.3	36.1	0.39	1,287.2	56.8	0.43	ZZ
GQK3QP		1,194.6	37.3	0.40	1,276.8	46.3	0.35	ZZ
GQYN7T		1,283.0	125.8	1.36	1,307.0	76.6	0.58	ZZ
GZDD47		1,042.1	-115.1	-1.24	1,265.7	35.2	0.27	ZZ
H4L7CJ		1,070.4	-86.8	-0.94	1,059.5	-170.9	-1.30	ZZ
HKJ2GP		1,144.0	-13.2	-0.14	1,108.5	-121.9	-0.92	ZZ
HMDQ63		1,251.0	93.8	1.01	1,280.0	49.6	0.38	ZZ
HR7PKJ		1,235.5	78.3	0.85	1,095.5	-134.9	-1.02	ZZ
KMXGR		1,171.6	14.4	0.16	1,239.5	9.1	0.07	ZZ
KRM8R3		1,090.7	-66.5	-0.72	1,048.6	-181.8	-1.38	ZZ
M3NQKU		1,175.0	17.8	0.19	1,340.0	109.6	0.83	ZZ
M6GWM		1,114.5	-42.7	-0.46	1,138.0	-92.4	-0.70	ZZ
MDUYG		1,206.1	48.9	0.53	1,207.2	-23.2	-0.18	ZZ
MYBJN		1,174.0	16.8	0.18	1,382.5	152.1	1.15	ZZ
N9WCGP	X	290.0	-867.2	-9.38	334.5	-895.9	-6.79	ZZ
NMAMW	M	1,132.2	-25.0	-0.27	1,155.8	-74.6	-0.57	ZZ
PX6NZM		1,182.5	25.3	0.27	1,388.5	158.1	1.20	ZZ
QJWDHT		1,104.0	-53.2	-0.58	1,238.0	7.6	0.06	ZZ
TFH8G3		1,274.5	117.3	1.27	1,262.5	32.1	0.24	ZZ
TM89CV		1,191.5	34.3	0.37	1,468.5	238.1	1.80	ZZ
WZ8M4A		1,056.0	-101.2	-1.09	1,063.0	-167.4	-1.27	ZZ
ZVFCZ8		1,190.0	32.8	0.35	1,304.5	74.1	0.56	ZZ

Analysis 632

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

Summary Statistics

Grand Means

1,157.24 psi

1,230.44 psi

Std Dev Btwn Labs

92.48 psi

131.92 psi

Statistics based on 28 of 30 reporting participants

Summary Statistics in SI Units

Grand Means

7.9788 MPa

8.48 MPa

Std Dev Btwn Labs

0.6377 MPa

0.91 MPa

Statistics based on 28 of 30 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #632

N9WCGP (X) - Data for all Samples are low.

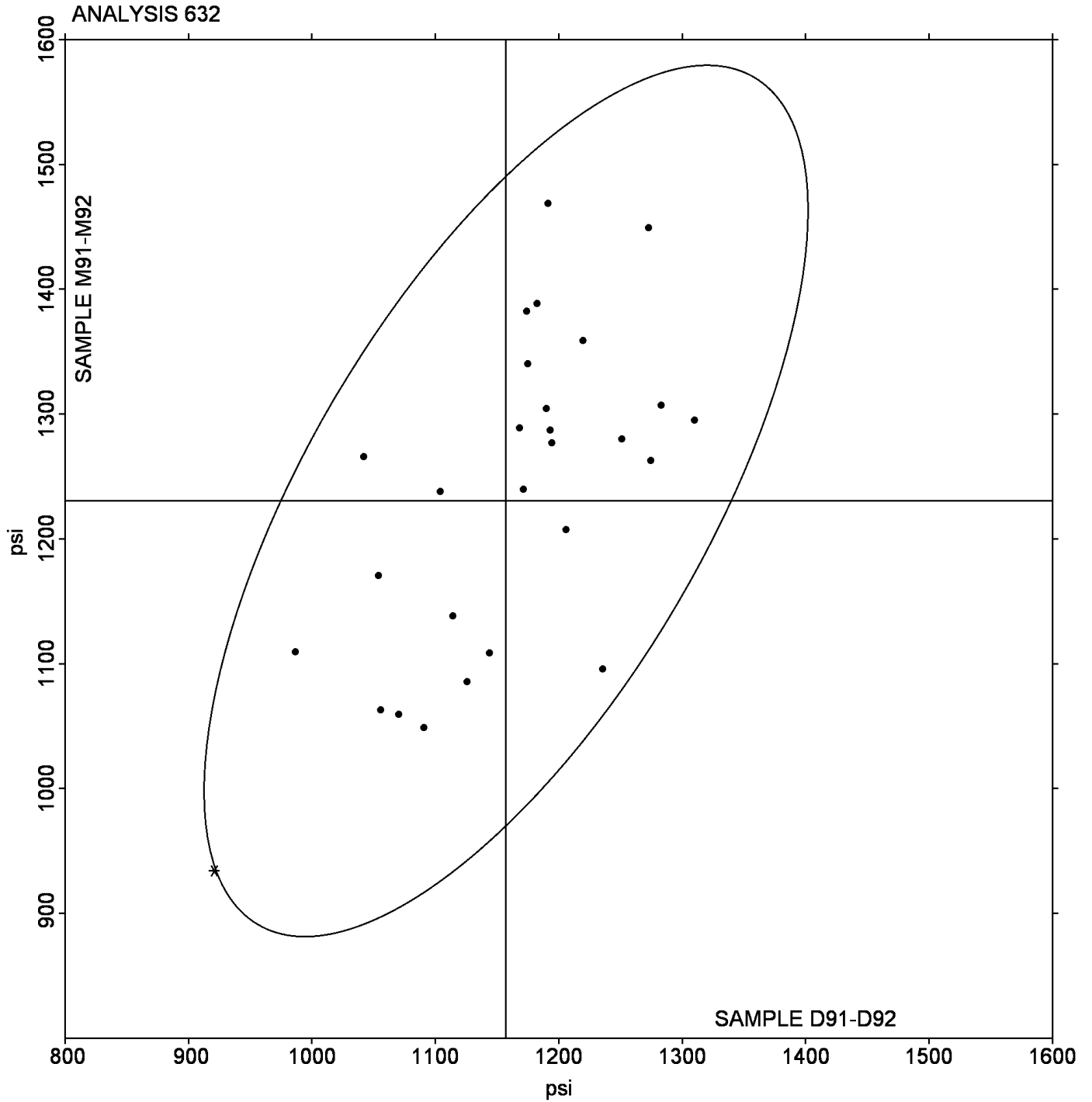
NMAMWE (M) - Data not reported for Sample set M92.

Analysis 632

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

Grand Mean Sample D91-D92 = 1,157.24 psi

Grand Mean Sample M91-M92 = 1,230.44 psi



Analysis 633

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

WebCode	Data Flag	Sample D91-D92			Sample M91-M92			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3763JA		219.0	-25.9	-1.42	253.0	-23.1	-0.77	ZZ
4BPHAZ		244.6	-0.3	-0.02	296.2	20.1	0.67	ZZ
79Q6CZ		226.5	-18.4	-1.01	241.5	-34.6	-1.15	ZZ
8HWENG		251.5	6.5	0.36	277.4	1.2	0.04	ZZ
96394Z		245.5	0.6	0.03	302.5	26.4	0.88	ZZ
B6BUGC		263.4	18.4	1.01	277.9	1.8	0.06	ZZ
BRRVZB		252.5	7.6	0.42	276.5	0.4	0.01	ZZ
CAD7F4	X	122.5	-122.4	-6.72	141.0	-135.1	-4.49	ZZ
CCQTDC		248.0	3.1	0.17	336.5	60.4	2.01	ZZ
DEK7EZ		270.6	25.6	1.41	293.4	17.3	0.57	ZZ
EHTYHA		224.0	-20.9	-1.15	275.9	-0.2	-0.01	ZZ
FXYJHM	M	247.7	2.8	0.15	260.6	-15.5	-0.52	ZZ
GKQBY		262.0	17.1	0.94	313.1	37.0	1.23	ZZ
GPNLKU		265.0	20.1	1.10	278.5	2.4	0.08	ZZ
JWJUTD		268.5	23.6	1.29	281.0	4.9	0.16	ZZ
K9A7KG		256.5	11.6	0.64	240.0	-36.1	-1.20	ZZ
KKRZFN		266.9	21.9	1.20	311.1	35.0	1.16	ZZ
KVH3B4		202.6	-42.3	-2.32	215.0	-61.2	-2.03	ZZ
M42KJX		250.5	5.6	0.31	293.0	16.9	0.56	ZZ
ML8B3J		269.9	25.0	1.37	306.8	30.7	1.02	ZZ
MYZNEB		236.5	-8.4	-0.46	242.0	-34.1	-1.13	ZZ
NTDPYT		242.5	-2.4	-0.13	295.0	18.9	0.63	ZZ
P882MH		240.5	-4.4	-0.24	235.5	-40.6	-1.35	ZZ
PQKP3M		251.2	6.3	0.34	284.3	8.2	0.27	ZZ
R936YG		216.5	-28.4	-1.56	251.0	-25.1	-0.84	ZZ
RV2Y2J		225.0	-19.9	-1.09	269.5	-6.6	-0.22	ZZ
TZUHWF		245.5	0.6	0.03	290.0	13.9	0.46	ZZ
U2RWBJ		256.0	11.1	0.61	318.0	41.9	1.39	ZZ
UZ7P2T		235.0	-10.0	-0.55	232.1	-44.1	-1.46	ZZ
XAR9T4		221.9	-23.0	-1.26	245.1	-31.0	-1.03	ZZ

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

Summary Statistics

Grand Means

244.93 psi

276.14 psi

Std Dev Btwn Labs

18.22 psi

30.09 psi

Statistics based on 28 of 30 reporting participants

Summary Statistics in SI Units

Grand Means

1.6887 MPa

1.90 MPa

Std Dev Btwn Labs

0.1256 MPa

0.21 MPa

Statistics based on 28 of 30 reporting participants

All samples : Polyisoprene compound, batch #1

Comments on assigned Data Flags for Test #633

CAD7F4 (X) - Data for all Samples are low.

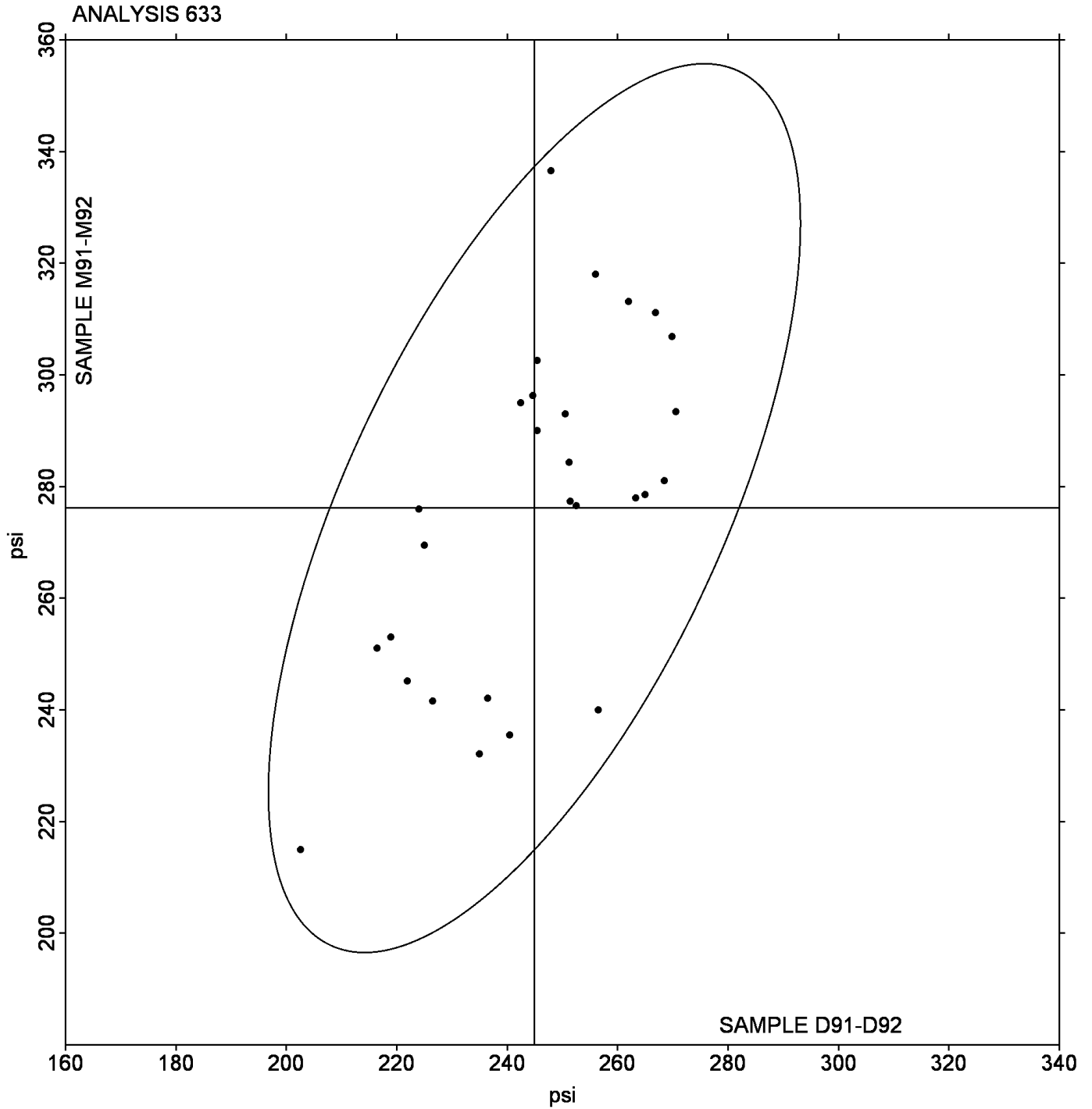
FXYJHM (M) - Data not reported for Sample set M92.

Analysis 633

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

Grand Mean Sample D91-D92 = 244.93 psi

Grand Mean Sample M91-M92 = 276.14 psi



Rubber Interlaboratory Testing Program

Analysis 660

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

WebCode	Data Flag	Sample V91-V92			Sample V93-V94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3TABLD		76.26	0.15	0.16	48.31	-0.35	-0.46	XX
443AF6		75.52	-0.59	-0.65	48.15	-0.51	-0.66	MR
6YTKYN		76.47	0.36	0.39	49.27	0.61	0.79	MR
72GKM9		75.42	-0.69	-0.76	48.45	-0.21	-0.27	MR
78WE97		75.35	-0.76	-0.83	47.78	-0.88	-1.14	MR
7MJ9GR	*	76.78	0.67	0.74	47.63	-1.03	-1.33	MP
88UXWR		77.50	1.39	1.52	49.95	1.29	1.67	MR
9FW8FQ		75.05	-1.06	-1.16	48.17	-0.49	-0.64	MR
ARKJ33		75.56	-0.55	-0.60	49.20	0.53	0.69	MM
ATZWRX		74.17	-1.94	-2.13	47.60	-1.06	-1.37	TV
C73MXV		75.92	-0.19	-0.21	48.67	0.01	0.01	MP
E434CY	X	81.72	5.61	6.15	50.80	2.14	2.78	MZ
EEQUCX		77.78	1.67	1.83	49.10	0.44	0.57	TV
FF8EL7		75.23	-0.88	-0.96	47.98	-0.68	-0.88	MR
HN6CFZ		75.20	-0.91	-1.00	47.63	-1.03	-1.33	MR
HV9VX4		76.23	0.12	0.13	48.64	-0.02	-0.03	MR
KNMZAT		76.28	0.17	0.19	48.88	0.22	0.29	MR
LGQAVV		76.30	0.19	0.21	48.27	-0.39	-0.51	MR
LY39NX	*	78.53	2.42	2.66	50.78	2.12	2.76	TV
MFWXR		76.10	-0.01	-0.01	48.27	-0.39	-0.51	MR
MJPK69		76.95	0.84	0.92	49.97	1.31	1.69	MR
P4EHXB		75.52	-0.59	-0.65	48.06	-0.60	-0.78	MR
RR9B2B		75.65	-0.46	-0.51	48.75	0.09	0.12	MR
U4NAAX		75.50	-0.61	-0.67	48.33	-0.33	-0.43	MR
U4RDWU		75.95	-0.16	-0.18	48.85	0.19	0.25	MR
VYHF8L		77.05	0.94	1.03	48.90	0.24	0.31	MR
W4XP7G		75.40	-0.71	-0.78	47.80	-0.86	-1.12	MR
WERXW		75.99	-0.13	-0.14	48.46	-0.21	-0.27	TV
XBTWF8		76.50	0.39	0.43	49.13	0.47	0.61	MR
XWUWX		77.23	1.12	1.23	49.93	1.27	1.65	MR
ZKQYQ3		76.70	0.59	0.65	49.22	0.56	0.72	MR
ZXH8MN		75.35	-0.76	-0.83	48.37	-0.29	-0.38	MR

Analysis 660

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

		Summary Statistics	
Grand Means	76.111 ML 1 + 4	48.661 ML 1 + 4	
Stnd Dev Btwn Labs	0.911 ML 1 + 4	0.770 ML 1 + 4	
Statistics based on 31 of 32 reporting participants			

Samples V91-V92: NBR & V93-V94: Butyl

Comments on assigned Data Flags for Test #660

E434CY (X) - Data for all Samples are high.

Instrument Code Listing

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

Instruments:

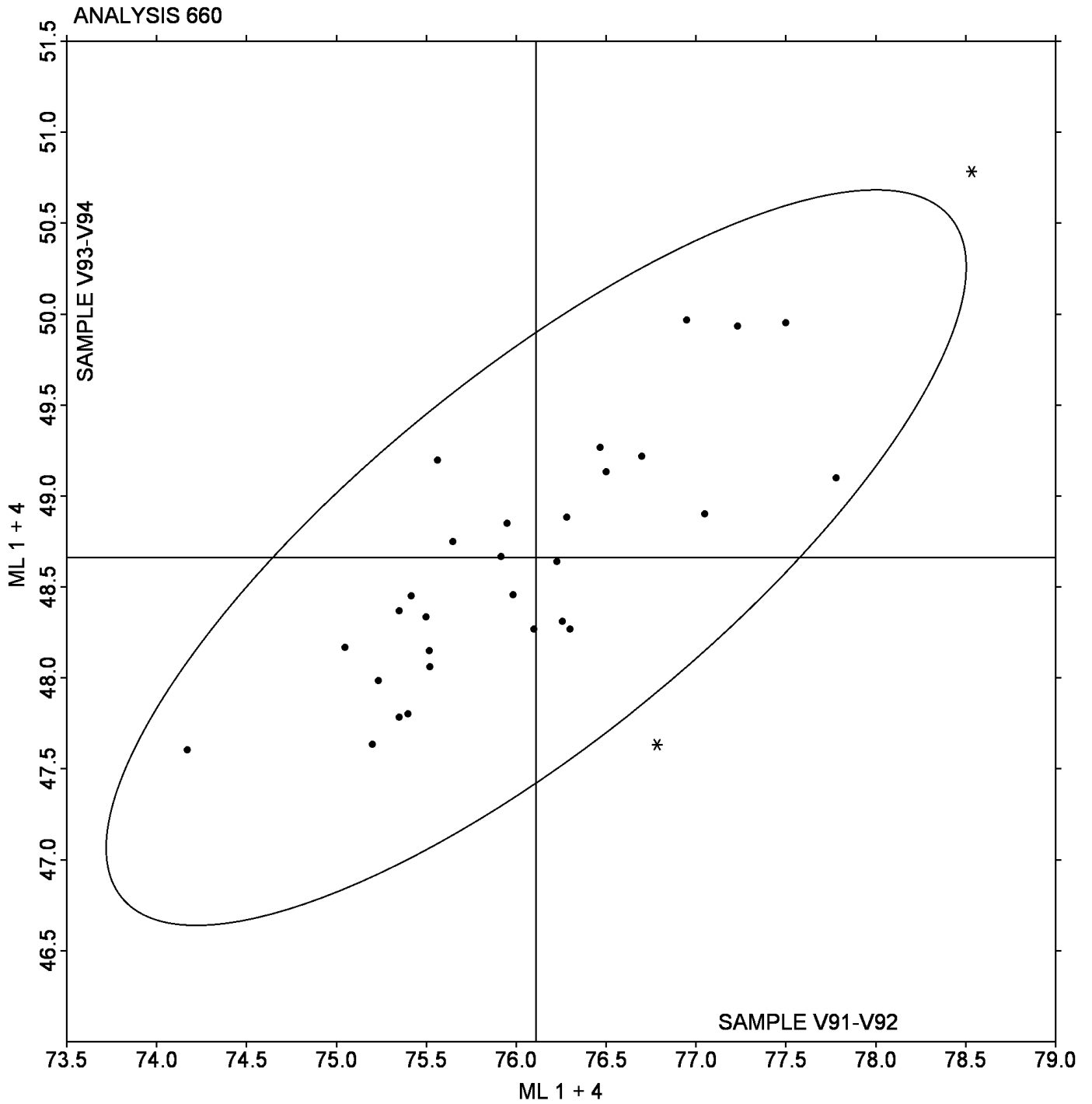
- | | |
|--|--|
| (ML) Alpha Technologies/Monsanto model not specified | (MM) Alpha Technologies Model 1xxx or OSM |
| (MP) Monsanto Compact Mooney Viscometer | (MR) Alpha Technologies Model MV2000/MV2000E |
| (MZ) Rebuilt Monsanto Mooney Viscometer | (SF) Scott STI (any model) |
| (TV) Tech Pro Visc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

Analysis 660

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

Grand Mean Sample V91-V92 = 76.111 ML 1 + 4

Grand Mean Sample V93-V94 = 48.661 ML 1 + 4



Analysis 661

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

WebCode	Data Flag	Sample V91-V92			Sample V93-V94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2LWCL4		75.99	-0.12	-0.13	46.72	-0.19	-0.23	TV
3FWBCD		76.30	0.20	0.21	46.72	-0.19	-0.23	MR
4EMHBC		76.26	0.15	0.17	46.64	-0.27	-0.32	XX
4XHJDP		76.47	0.36	0.39	47.37	0.46	0.55	MR
6AAJRW		75.52	-0.58	-0.63	46.62	-0.29	-0.35	MR
6UXY4E		75.20	-0.90	-0.98	45.80	-1.11	-1.33	MR
74FHUA		76.10	0.00	0.00	46.38	-0.52	-0.63	MR
7GTY69		75.40	-0.70	-0.76	46.35	-0.56	-0.67	MR
87RY7	X	81.72	5.61	6.08	48.28	1.38	1.65	MZ
8J6Y97		77.78	1.68	1.82	47.24	0.34	0.40	TV
A9BTRC		75.23	-0.87	-0.94	46.30	-0.61	-0.73	MR
BU7W8N		75.05	-1.05	-1.14	46.72	-0.19	-0.23	MR
BUE8KU		76.50	0.40	0.43	47.67	0.76	0.91	MR
C33B3V		75.92	-0.19	-0.20	46.32	-0.59	-0.71	MM
EZEHEJ		76.78	0.68	0.74	45.82	-1.09	-1.31	MP
FGQAJ3		77.05	0.95	1.03	46.42	-0.49	-0.59	MR
FY6MU6	*	78.53	2.43	2.63	49.57	2.66	3.19	TV
G4PD7Y		75.42	-0.69	-0.74	46.80	-0.11	-0.13	MR
JY63CT		75.56	-0.54	-0.58	47.35	0.44	0.53	MM
LWXK7		75.52	-0.59	-0.64	46.37	-0.54	-0.65	MR
MYU4AZ		76.23	0.12	0.13	46.82	-0.09	-0.11	MR
PT9BMZ		75.95	-0.15	-0.17	47.58	0.68	0.81	MR
RNJGRG		74.17	-1.93	-2.10	46.27	-0.64	-0.77	XX
WQJTN7		75.65	-0.45	-0.49	46.98	0.08	0.09	MR
WVJUB9		77.23	1.13	1.23	48.57	1.66	1.99	MR
XU3EJ6		76.70	0.60	0.65	47.40	0.49	0.59	MR
YCX272		77.50	1.40	1.51	48.15	1.24	1.49	MR
YDBMW		75.35	-0.75	-0.82	45.77	-1.14	-1.37	MR
ZUHVQN		75.35	-0.75	-0.82	46.80	-0.11	-0.13	MR
ZZ4TFD		76.28	0.18	0.20	46.83	-0.07	-0.09	MR

Analysis 661

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

		Summary Statistics	
Grand Means	76.103 ML 1 + 8	46.907 ML 1 + 8	
Std Dev Btwn Labs	0.923 ML 1 + 8	0.833 ML 1 + 8	
Statistics based on 29 of 30 reporting participants			

Please refer to the sample information provided for Analysis 660.

Comments on assigned Data Flags for Test #661

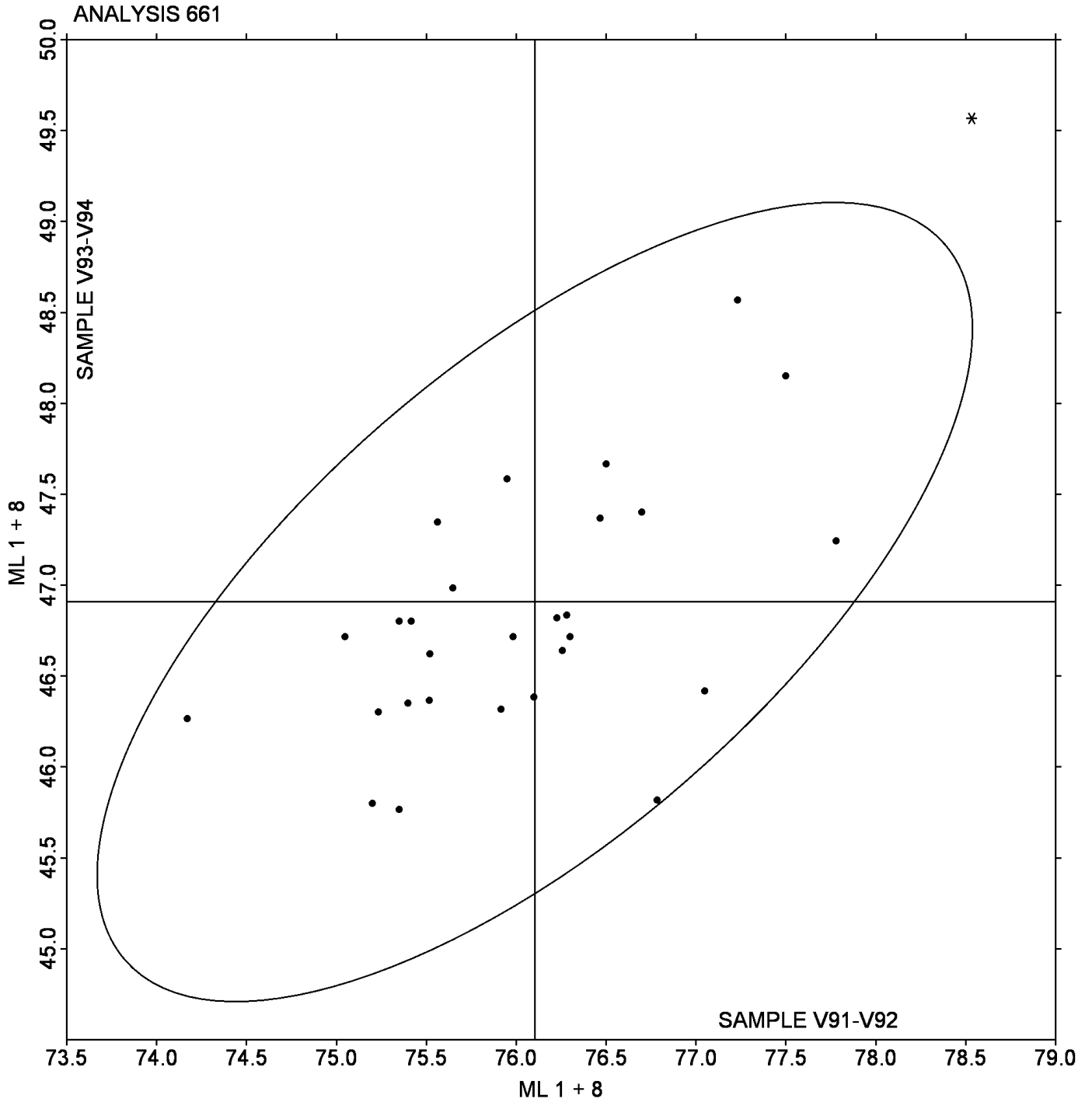
87RYY7 (X) - Data for Sample set V93-V94 are high.

Analysis 661

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

Grand Mean Sample V91-V92 = 76.103 ML 1 + 8

Grand Mean Sample V93-V94 = 46.907 ML 1 + 8



Analysis 662

Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample V91-V92			Sample V93-V94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3BFUV4		15.50	-0.07	-0.22	5.380	-0.516	-0.30	XX
9HAQL9		16.10	0.53	1.67	5.200	-0.696	-0.41	XX
CLZ8HB		15.60	0.03	0.08	5.125	-0.771	-0.45	MR
HLDQRV	X	3,344.30	3,328.73	10,513.44	498.800	492.904	289.66	TV
KBJKB2		15.83	0.26	0.83	5.333	-0.562	-0.33	MR
UF4KVF		15.47	-0.10	-0.33	5.248	-0.647	-0.38	MR
UZV9GA		15.13	-0.44	-1.39	9.750	3.854	2.27	MR
ZW6HKD		15.37	-0.20	-0.64	5.233	-0.662	-0.39	MR

Summary Statistics

Grand Means

15.570 seconds

5.8957 seconds

Std Dev Btwn Labs

0.317 seconds

1.7016 seconds

Statistics based on 7 of 8 reporting participants

Samples V91-V92: NBR & V93-V94: Butyl

Comments on assigned Data Flags for Test #662

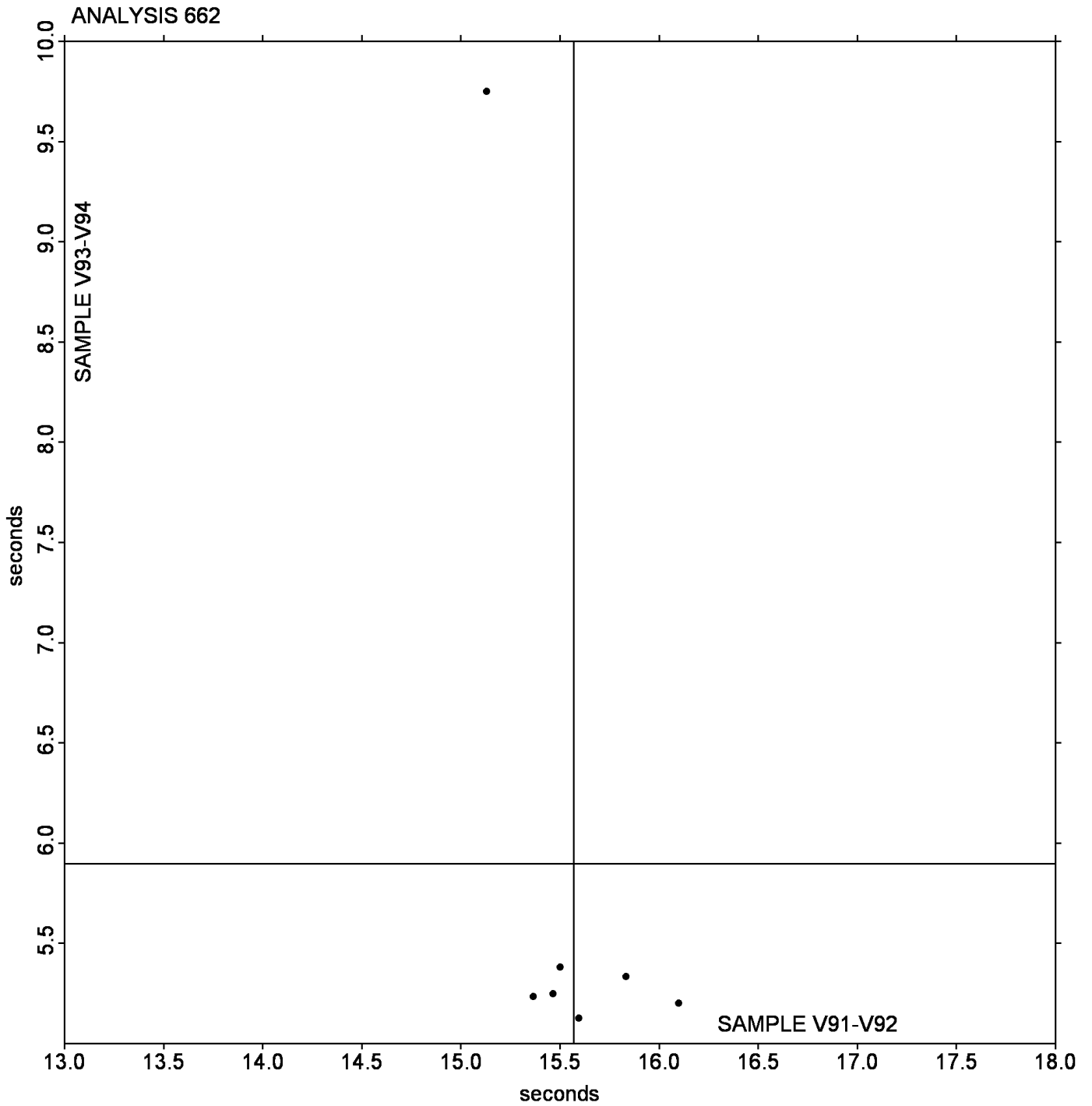
HLDQRV (X) - Extreme data for both Sample sets.

Analysis 662

Mooney Stress Relaxation: t80 (seconds)

Grand Mean Sample V91-V92 = 15.570 seconds

Grand Mean Sample V93-V94 = 5.8957 seconds



Analysis 663

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample V91-V92			Sample V93-V94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2A6RA6		84.27	1.24	0.36	95.25	-0.03	-0.02	XX
2HPMRL		84.23	1.21	0.35	96.17	0.89	0.76	MR
6QEDEJ		84.25	1.22	0.35	95.86	0.58	0.50	MR
6XXW6C		84.11	1.08	0.31	95.82	0.55	0.47	XX
NAW9CL		84.29	1.26	0.36	95.69	0.42	0.36	MR
QMMVX		84.24	1.22	0.35	95.31	0.04	0.03	MR
TW8WQ		84.42	1.39	0.40	95.63	0.36	0.31	MR
XTKT9G		74.42	-8.61	-2.47	92.46	-2.81	-2.39	TV

Summary Statistics

Grand Means

83.028 percent

95.273 percent

Std Dev Btwn Labs

3.481 percent

1.174 percent

Statistics based on 8 of 8 reporting participants

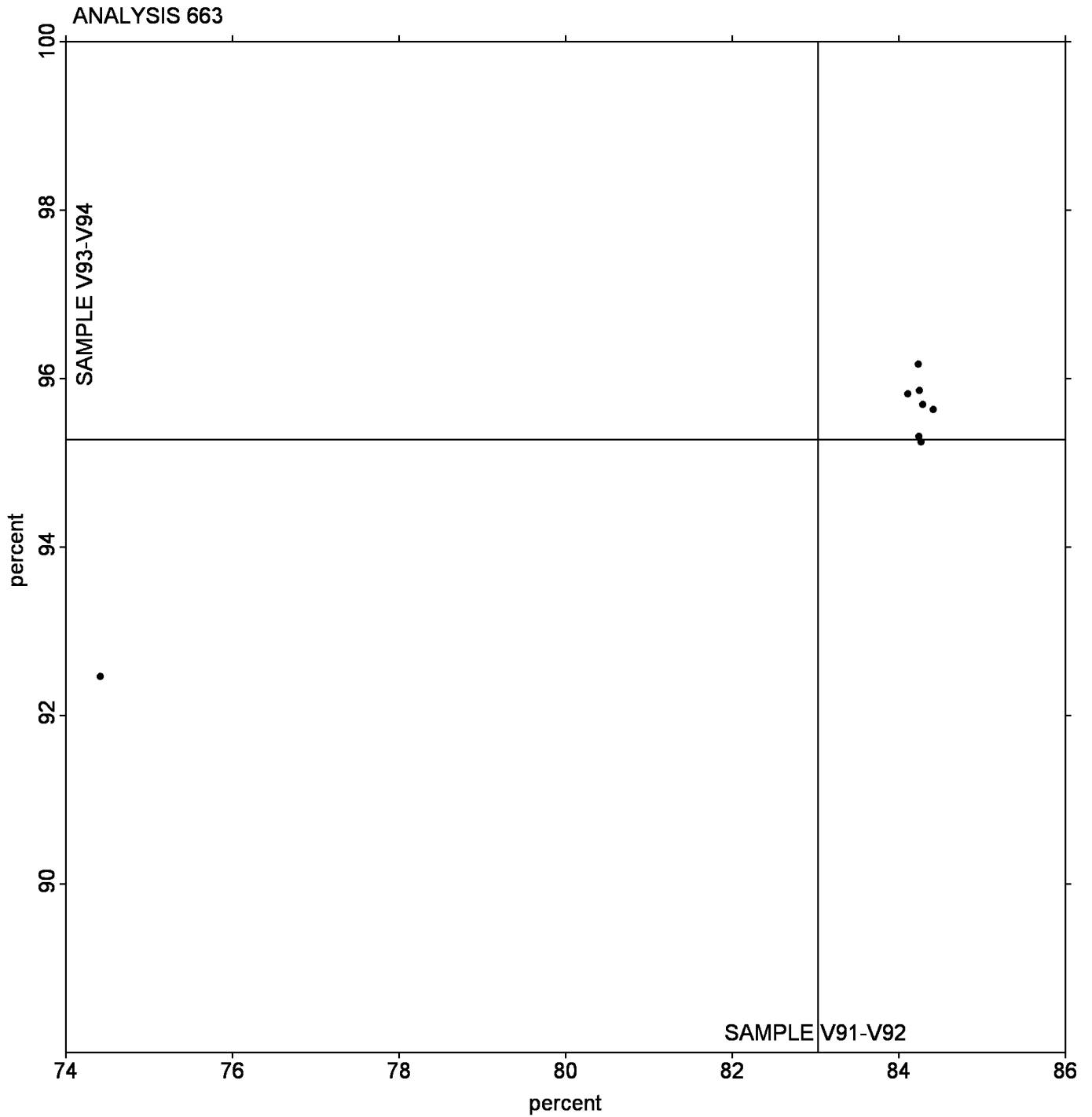
Samples V91-V92: NBR & V93-V94: Butyl

Analysis 663

Mooney Stress Relaxation: X30 (percent)

Grand Mean Sample V91-V92 = 83.028 percent

Grand Mean Sample V93-V94 = 95.273 percent



Analysis 664

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

WebCode	Data Flag	Sample V91-V92			Sample V93-V94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
22HJFA		1,282.1	20.3	0.25	251.0	-7.4	-0.26	MR
29FK7L		1,286.5	24.8	0.30	238.3	-20.0	-0.71	XX
6U6ZBZ		1,285.8	24.1	0.30	253.7	-4.7	-0.17	MR
9YG9VX		1,298.4	36.7	0.45	277.0	18.7	0.66	XX
FUN6X9		1,295.1	33.4	0.41	240.4	-18.0	-0.64	MR
YJAQMF		1,078.4	-183.4	-2.26	313.4	55.0	1.96	TV
ZPZBCG		1,305.9	44.1	0.54	234.6	-23.7	-0.84	XX

Summary Statistics

Grand Means

1,261.74 M-s

258.34 M-s

Std Dev Btwn Labs

81.28 M-s

28.11 M-s

Statistics based on 7 of 7 reporting participants

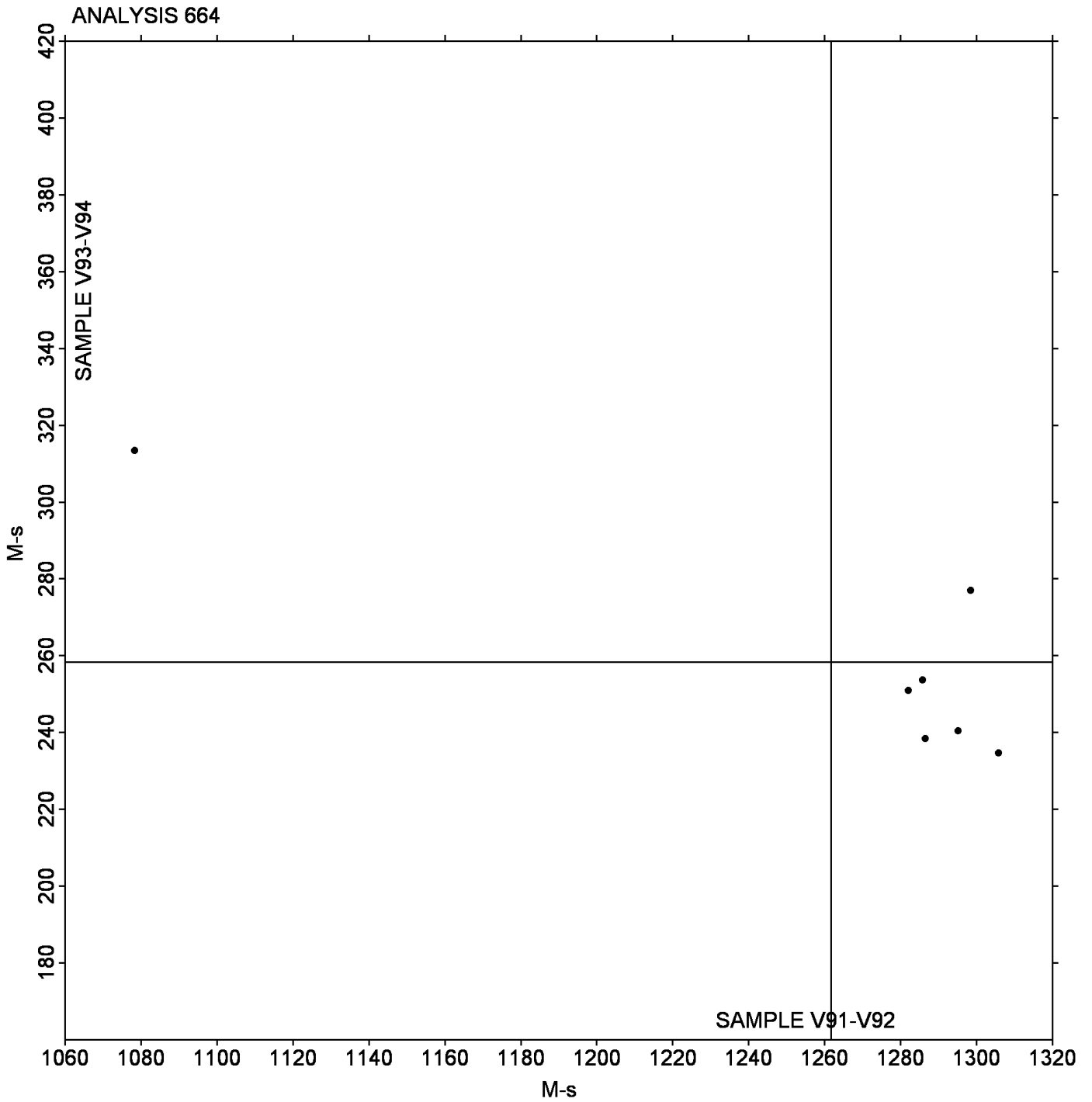
Samples V91-V92: NBR & V93-V94: Butyl

Analysis 664

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

Grand Mean Sample V91-V92 = 1,261.74 M-s

Grand Mean Sample V93-V94 = 258.34 M-s



Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2DH9AF		1.820	-0.029	-0.20	1.290	-0.010	-0.02	ZZ
2WXV6J		1.660	-0.189	-1.31	0.140	-1.160	-2.26	ZZ
3F8BV3		1.913	0.065	0.45	1.737	0.437	0.85	ZZ
4NYYHQ		1.957	0.108	0.75	0.947	-0.353	-0.69	ZZ
C872N3		1.812	-0.037	-0.26	0.522	-0.778	-1.52	ZZ
CYUREN		2.125	0.276	1.91	1.223	-0.077	-0.15	ZZ
JDVCBQ		1.837	-0.012	-0.08	1.920	0.620	1.21	ZZ
LQYVZ3		1.808	-0.040	-0.28	1.118	-0.182	-0.35	ZZ
NGBZHJ		2.090	0.241	1.67	1.830	0.530	1.03	ZZ
TE2E3L		1.868	0.020	0.14	1.725	0.425	0.83	ZZ
UMCECB		1.815	-0.034	-0.23	1.367	0.067	0.13	ZZ
XF3DPV		1.600	-0.249	-1.72	1.130	-0.170	-0.33	ZZ
XTX9HJ		1.862	0.013	0.09	1.743	0.443	0.86	ZZ
XV8GKH		1.715	-0.134	-0.93	1.507	0.207	0.40	ZZ

Summary Statistics

Grand Means

1.8487 minutes

1.2999 minutes

Std Dev Btwn Labs

0.1445 minutes

0.5132 minutes

Statistics based on 14 of 14 reporting participants

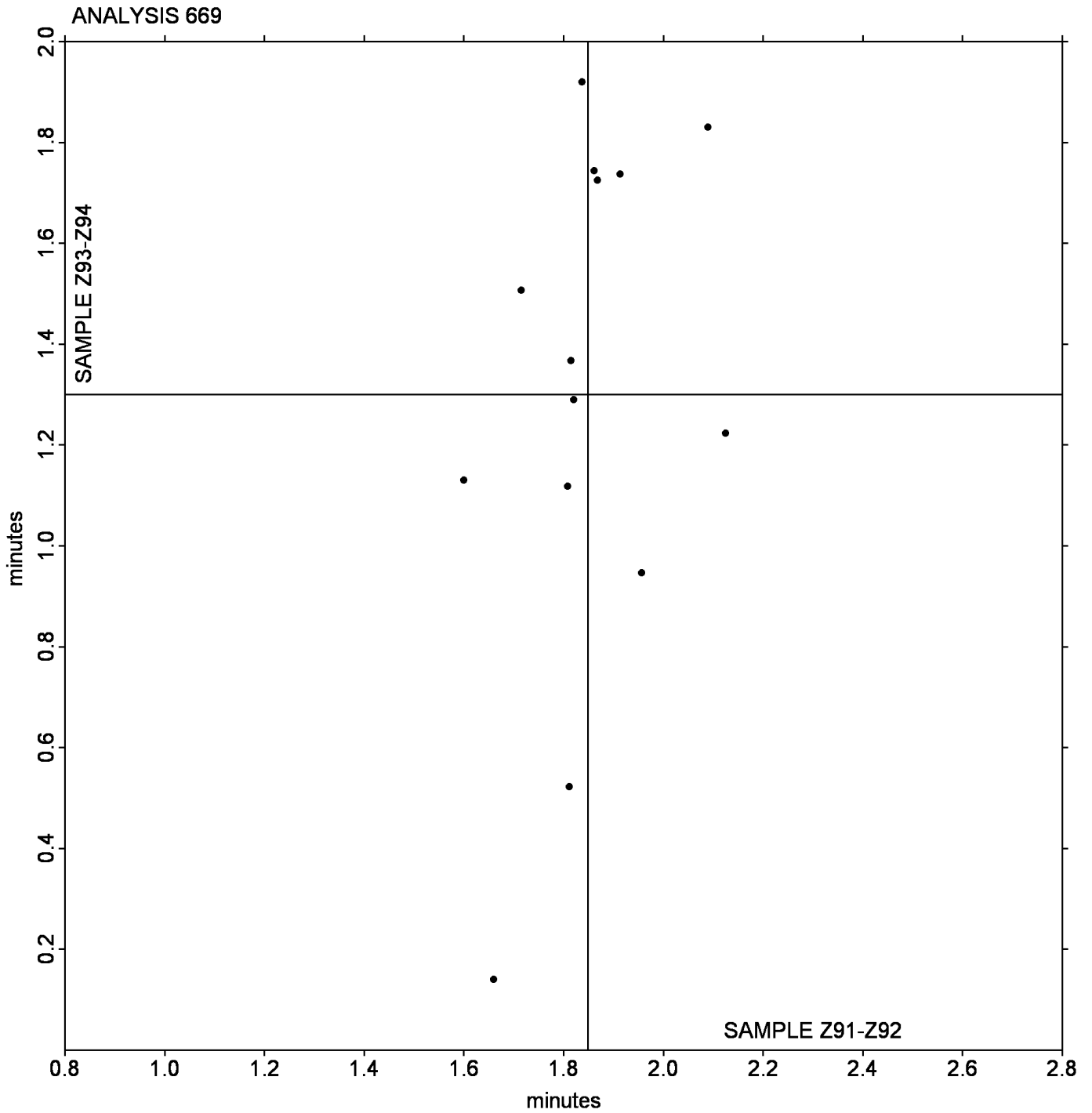
Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

Analysis 669

ODR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample Z91-Z92 = 1.8487 minutes

Grand Mean Sample Z93-Z94 = 1.2999 minutes



Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3WKGUE		1.388	-0.001	-0.01	1.728	0.598	1.14	ZZ
7DULJ3		1.530	0.140	1.12	1.625	0.495	0.95	ZZ
9HB69L		1.503	0.114	0.90	1.498	0.368	0.70	ZZ
9PJD4P		1.290	-0.100	-0.79	1.347	0.217	0.41	ZZ
A267RX		1.300	-0.090	-0.71	1.088	-0.042	-0.08	ZZ
CFQ2T7		1.353	-0.036	-0.29	0.793	-0.337	-0.64	ZZ
FKT3JQ		1.442	0.052	0.41	1.627	0.497	0.95	ZZ
G44XL4		1.237	-0.153	-1.22	0.117	-1.013	-1.94	ZZ
GT6ZZP		1.338	-0.051	-0.41	1.040	-0.090	-0.17	ZZ
JMEDCM		1.430	0.040	0.32	1.520	0.390	0.74	ZZ
KVZK46		1.330	-0.060	-0.47	0.665	-0.465	-0.89	ZZ
N2FT9Q		1.428	0.039	0.31	0.348	-0.782	-1.49	ZZ
NGHKM		1.492	0.102	0.81	1.842	0.712	1.36	ZZ
PPG7P7		1.143	-0.246	-1.96	0.952	-0.178	-0.34	ZZ
R7ZWM		1.640	0.250	1.99	0.762	-0.368	-0.70	ZZ

Summary Statistics

Grand Means

1.3897 minutes

1.1301 minutes

Std Dev Btwn Labs

0.1257 minutes

0.5234 minutes

Statistics based on 15 of 15 reporting participants

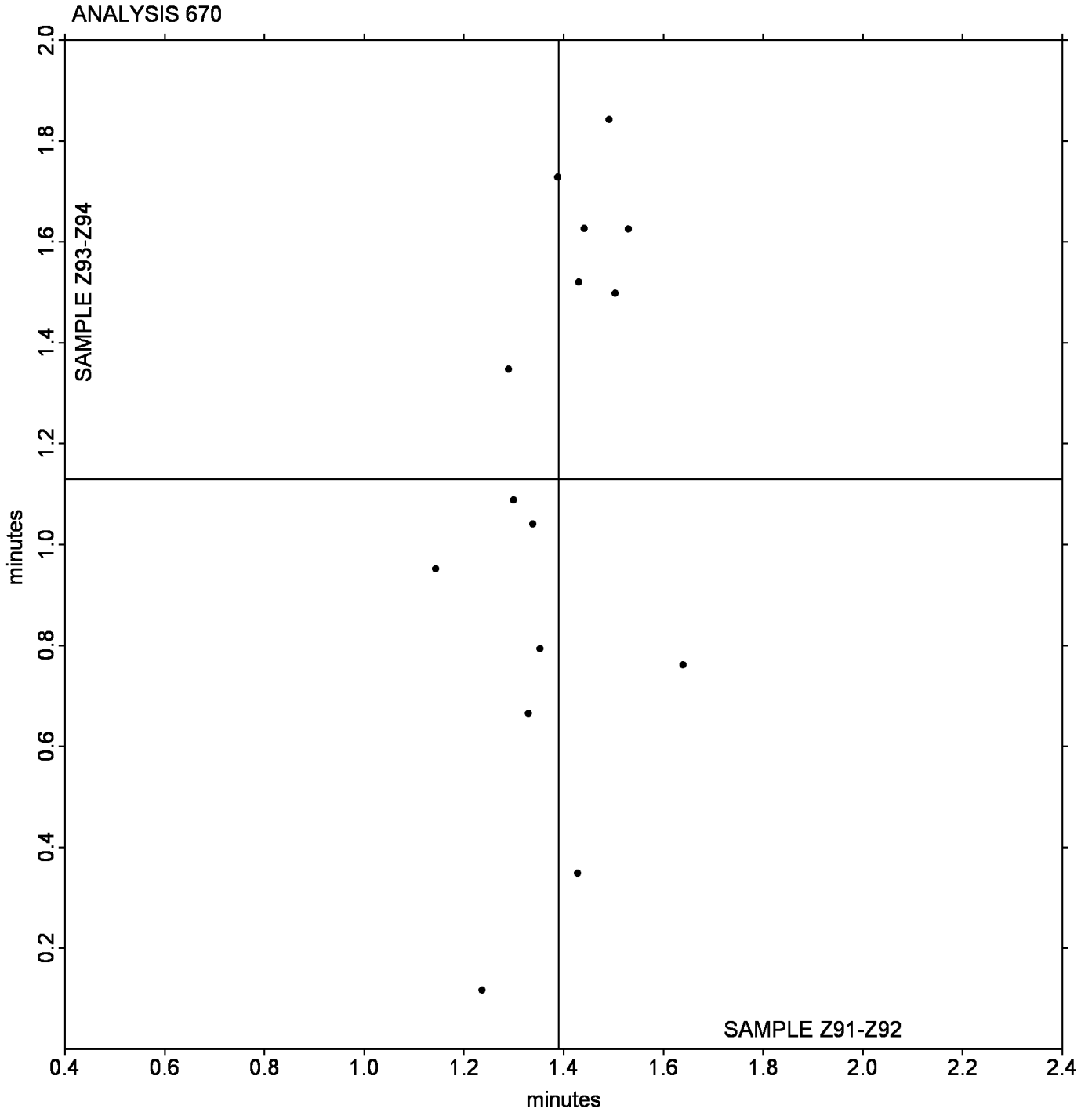
Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

Analysis 670

ODR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample Z91-Z92 = 1.3897 minutes

Grand Mean Sample Z93-Z94 = 1.1301 minutes



Rubber Interlaboratory Testing Program

Analysis 671

ODR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
8VHY6Y		3.427	0.027	0.10	2.920	0.066	0.19	ZZ
94VVLY		3.332	-0.068	-0.25	2.802	-0.052	-0.15	ZZ
977UVZ		3.167	-0.233	-0.87	3.143	0.290	0.84	ZZ
BHYFKZ		3.273	-0.127	-0.47	3.128	0.275	0.80	ZZ
EPR8KB		3.477	0.077	0.28	2.632	-0.222	-0.64	ZZ
H83D3P		3.858	0.458	1.70	3.360	0.506	1.47	ZZ
HUTVZ4		3.080	-0.320	-1.19	2.297	-0.557	-1.61	ZZ
JBXTJC		3.040	-0.360	-1.34	2.763	-0.090	-0.26	ZZ
JD4BQM		3.472	0.072	0.27	3.082	0.228	0.66	ZZ
MUHVT9		3.722	0.322	1.20	2.910	0.056	0.16	ZZ
PW2BTT		3.385	-0.015	-0.06	3.223	0.370	1.07	ZZ
QBZLQZ		4.013	0.613	2.28	3.215	0.361	1.05	ZZ
TMW7ZF		3.277	-0.123	-0.46	2.853	0.000	0.00	ZZ
UYQBUL		3.213	-0.187	-0.69	2.123	-0.730	-2.12	ZZ
V83TMJ		3.428	0.028	0.10	2.519	-0.335	-0.97	ZZ
ZZAAPX		3.238	-0.162	-0.60	2.688	-0.165	-0.48	ZZ

Summary Statistics	
Grand Means	3.4001 minutes 2.8537 minutes
Std Dev Btwn Labs	0.2690 minutes 0.3450 minutes
Statistics based on 16 of 16 reporting participants	

Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
29WHLF		11.70	0.27	0.30	8.487	-0.773	-0.44	ZZ
3FCQNV		11.02	-0.40	-0.44	8.492	-0.768	-0.43	ZZ
4H93JM		10.66	-0.76	-0.85	7.343	-1.916	-1.08	ZZ
7A3UR7		12.03	0.60	0.67	10.298	1.039	0.59	ZZ
7GQE9Q		11.81	0.38	0.43	8.437	-0.823	-0.46	ZZ
BJXCKW		11.81	0.39	0.43	9.133	-0.126	-0.07	ZZ
E2T38U		11.38	-0.05	-0.05	10.635	1.375	0.78	ZZ
E8VY8T		10.79	-0.63	-0.70	10.108	0.849	0.48	ZZ
G3FGNZ		10.02	-1.41	-1.56	10.297	1.037	0.59	ZZ
JPRQNM		12.31	0.88	0.98	8.730	-0.530	-0.30	ZZ
L4QU2Z		10.38	-1.04	-1.16	6.833	-2.426	-1.37	ZZ
RA3QMN		10.44	-0.98	-1.09	6.910	-2.350	-1.33	ZZ
RRWU4H		10.80	-0.63	-0.70	7.717	-1.543	-0.87	ZZ
W7MU3U		13.46	2.03	2.25	10.412	1.152	0.65	ZZ
WKK79B		12.31	0.89	0.98	10.657	1.397	0.79	ZZ
XRFAUZ		11.88	0.45	0.50	13.668	4.409	2.49	ZZ

Summary Statistics

Grand Means

11.424 minutes

9.2598 minutes

Std Dev Btwn Labs

0.902 minutes

1.7721 minutes

Statistics based on 16 of 16 reporting participants

Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

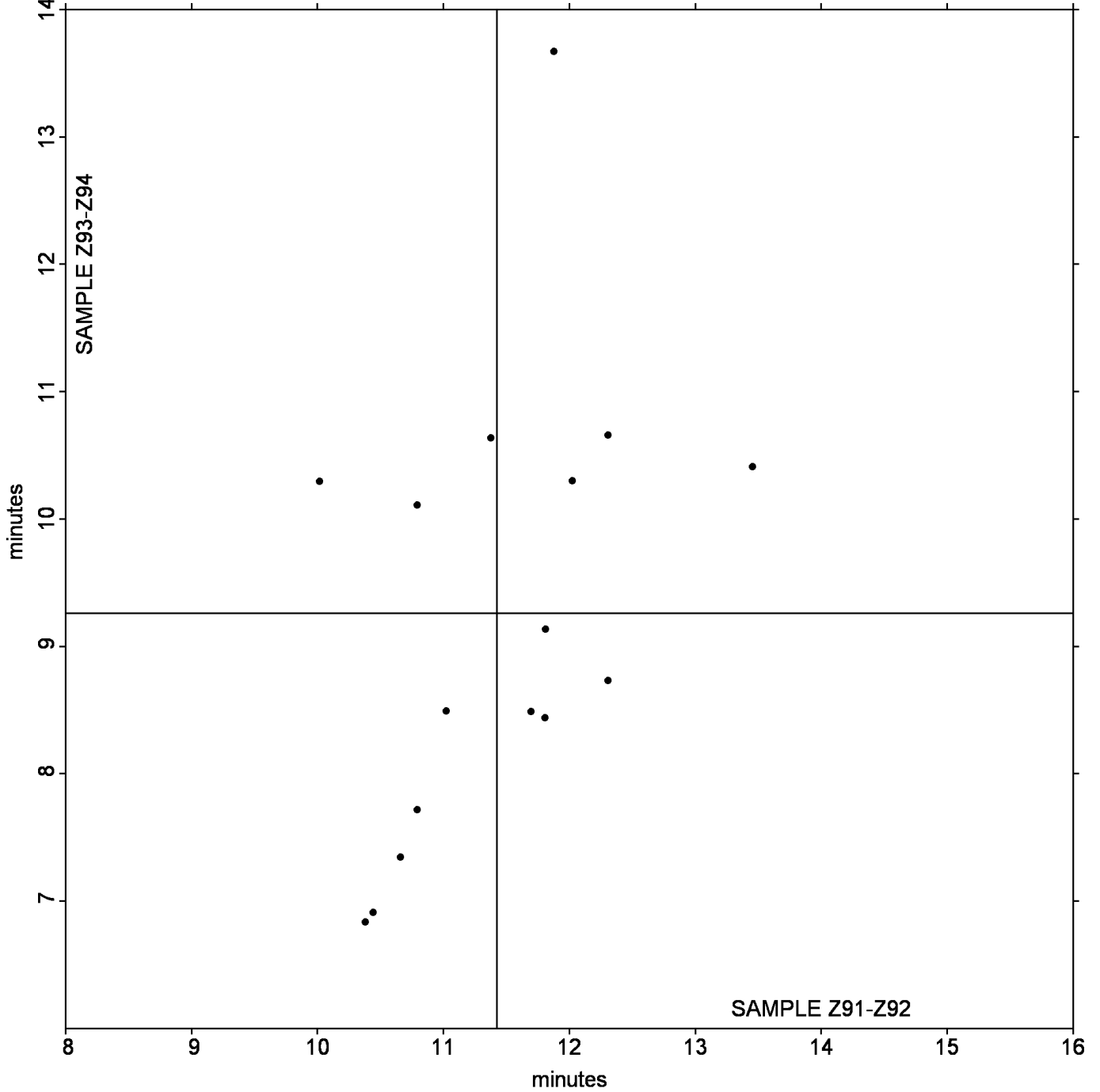
Analysis 672

ODR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample Z91-Z92 = 11.424 minutes

Grand Mean Sample Z93-Z94 = 9.2598 minutes

ANALYSIS 672



Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
28KNW9		7.090	-0.191	-0.15	25.28	0.76	0.15	ZZ
47JT4D		6.865	-0.416	-0.33	27.72	3.20	0.65	ZZ
8AJFPE		6.103	-1.178	-0.95	19.00	-5.52	-1.13	ZZ
ALP2DM		7.095	-0.186	-0.15	22.48	-2.04	-0.42	ZZ
FKYLQ9		7.907	0.626	0.50	23.99	-0.53	-0.11	ZZ
GCBLBV		6.563	-0.718	-0.58	22.60	-1.92	-0.39	ZZ
HCFFR9		8.727	1.446	1.16	27.68	3.16	0.65	ZZ
K976UW		8.123	0.842	0.68	24.20	-0.32	-0.06	ZZ
KFQAHN		8.915	1.634	1.31	33.20	8.68	1.77	ZZ
N9DCKU		10.182	2.901	2.33	35.79	11.27	2.30	ZZ
N9DRVL		5.975	-1.306	-1.05	18.22	-6.30	-1.29	ZZ
NN39AH		6.398	-0.883	-0.71	23.22	-1.30	-0.26	ZZ
PWE6RG		6.218	-1.063	-0.85	21.18	-3.34	-0.68	ZZ
R8YUE8		5.548	-1.733	-1.39	18.75	-5.77	-1.18	ZZ
VTYY7V		7.057	-0.224	-0.18	22.02	-2.50	-0.51	ZZ
ZENKV8		7.727	0.446	0.36	27.00	2.48	0.51	ZZ

Summary Statistics	
Grand Means	7.2809 lbf.in 24.519 lbf.in
Stnd Dev Btwn Labs	1.2459 lbf.in 4.902 lbf.in
Statistics based on 16 of 16 reporting participants	

Summary Statistics in SI Units	
Grand Means	8.2263 dN.m 27.703 dN.m
Stnd Dev Btwn Labs	1.4077 dN.m 5.538 dN.m
Statistics based on 16 of 16 reporting participants	

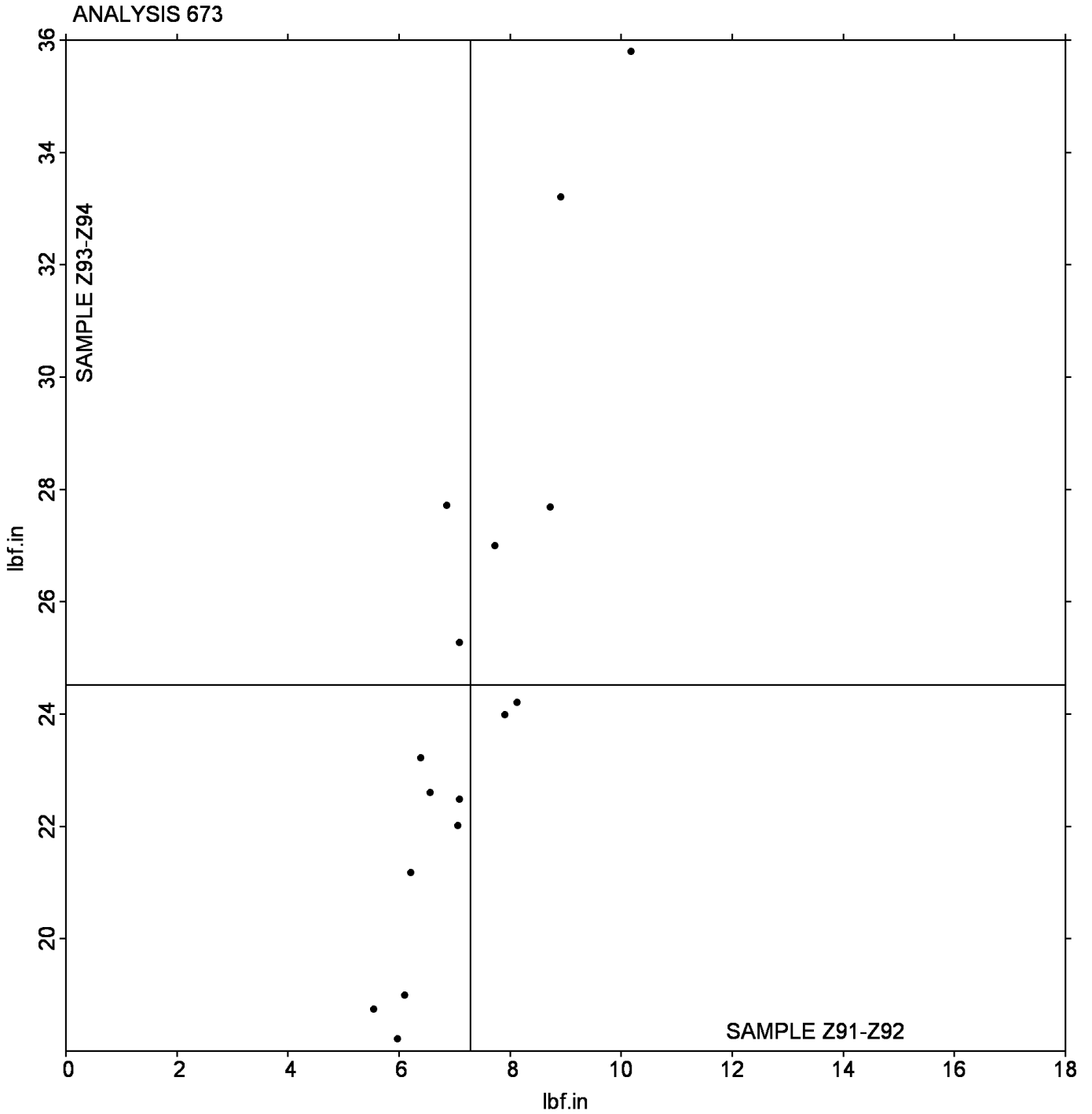
Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

Analysis 673

ODR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample Z91-Z92 = 7.2809 lbf.in

Grand Mean Sample Z93-Z94 = 24.519 lbf.in



Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z91-Z92			Sample Z93-Z94			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
7KAG8B		37.27	-2.59	-0.81	43.38	0.47	0.09	ZZ
7UEFQH		46.49	6.62	2.06	44.61	1.69	0.33	ZZ
AE7DJZ		38.17	-1.69	-0.53	40.17	-2.75	-0.53	ZZ
BYJY9		38.75	-1.12	-0.35	43.12	0.20	0.04	ZZ
DRK9ZU		41.75	1.88	0.58	42.75	-0.16	-0.03	ZZ
DUB2KB		39.49	-0.37	-0.12	37.89	-5.03	-0.97	ZZ
F36XNK		38.58	-1.28	-0.40	37.05	-5.86	-1.13	ZZ
HZFQQY		39.46	-0.40	-0.12	53.69	10.78	2.09	ZZ
J2BPKR		42.35	2.49	0.77	45.78	2.86	0.55	ZZ
LXEN4L		36.04	-3.82	-1.19	37.22	-5.70	-1.10	ZZ
NUYZ9L		46.03	6.17	1.92	51.10	8.19	1.59	ZZ
RPDGGG		42.37	2.51	0.78	44.72	1.81	0.35	ZZ
RRRA2U		38.30	-1.57	-0.49	37.00	-5.91	-1.14	ZZ
VLC7UW		39.74	-0.12	-0.04	44.62	1.71	0.33	ZZ
WJGNRF		34.91	-4.96	-1.54	36.18	-6.73	-1.30	ZZ
Z9YZRR		38.11	-1.76	-0.55	47.34	4.43	0.86	ZZ

Summary Statistics

Grand Means

39.862 lbf.in

42.913 lbf.in

Std Dev Btwn Labs

3.219 lbf.in

5.165 lbf.in

Statistics based on 16 of 16 reporting participants

Summary Statistics in SI Units

Grand Means

45.038 dN.m

48.485 dN.m

Std Dev Btwn Labs

3.638 dN.m

5.836 dN.m

Statistics based on 16 of 16 reporting participants

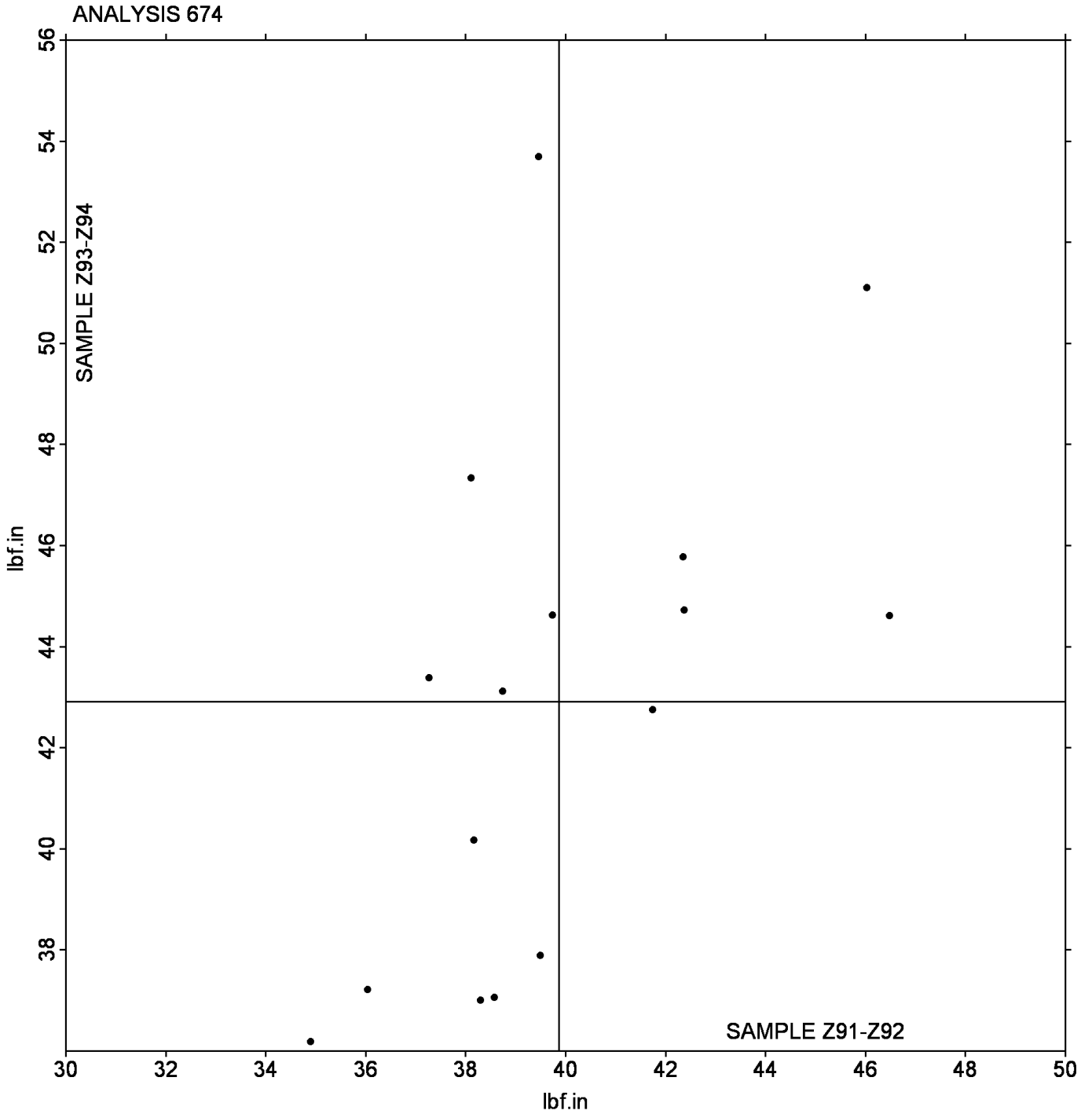
Samples Z91-Z92: EPDM compound #1 & Z93-Z94: EPDM compound #2

Analysis 674

ODR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample Z91-Z92 = 39.862 lbf.in

Grand Mean Sample Z93-Z94 = 42.913 lbf.in



Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2DLAD8		0.8800	0.1231	0.97	0.7717	0.0301	0.27	MC
2PVA7A		0.7417	-0.0152	-0.12	0.7683	0.0267	0.24	XX
2ZCTAK		0.6933	-0.0635	-0.50	0.6617	-0.0799	-0.71	MC
4JL926		0.7583	0.0015	0.01	0.7617	0.0201	0.18	MC
4QNH8W		0.9200	0.1631	1.28	0.8433	0.1017	0.91	MC
8RCMZK		0.7250	-0.0319	-0.25	0.6267	-0.1149	-1.03	MC
B8HLFY		0.8883	0.1315	1.03	0.8900	0.1484	1.32	MC
CHJB4D		0.8528	0.0959	0.75	0.8056	0.0640	0.57	MC
DALZDG		0.7067	-0.0502	-0.39	0.7417	0.0001	0.00	TP
FMKLQN		0.8350	0.0781	0.61	0.8017	0.0601	0.54	TP
JW6ZCH		0.6717	-0.0852	-0.67	0.7183	-0.0233	-0.21	MD
KQAJ96		0.8950	0.1381	1.09	0.8933	0.1517	1.35	MC
MFTRFK		0.7417	-0.0152	-0.12	0.6983	-0.0433	-0.39	TP
MFY47M		0.8111	0.0543	0.43	0.7889	0.0473	0.42	MC
NBTR8U		0.7783	0.0215	0.17	0.7267	-0.0149	-0.13	MC
NR3T7A		0.8233	0.0665	0.52	0.8200	0.0784	0.70	XX
R7HT6X		0.5400	-0.2169	-1.71	0.6017	-0.1399	-1.25	MC
TUZQ3W		0.8778	0.1209	0.95	0.8222	0.0806	0.72	MC
TZKMU3	*	0.4033	-0.3535	-2.78	0.4267	-0.3149	-2.81	MC
V2U8ET		0.8200	0.0631	0.50	0.8017	0.0601	0.54	MC
VTHNJA		0.8217	0.0648	0.51	0.8200	0.0784	0.70	TP
VYWNC		0.5233	-0.2335	-1.84	0.5000	-0.2416	-2.16	MC
VZX4UC		0.6317	-0.1252	-0.98	0.6650	-0.0766	-0.68	MD
WMDXJ		0.7467	-0.0102	-0.08	0.7683	0.0267	0.24	MC
XWLPZ		0.8350	0.0781	0.61	0.8167	0.0751	0.67	MD

Summary Statistics

Grand Means

0.75687 minutes

0.74160 minutes

Std Dev Btwn Labs

0.12712 minutes

0.11205 minutes

Statistics based on 25 of 25 reporting participants

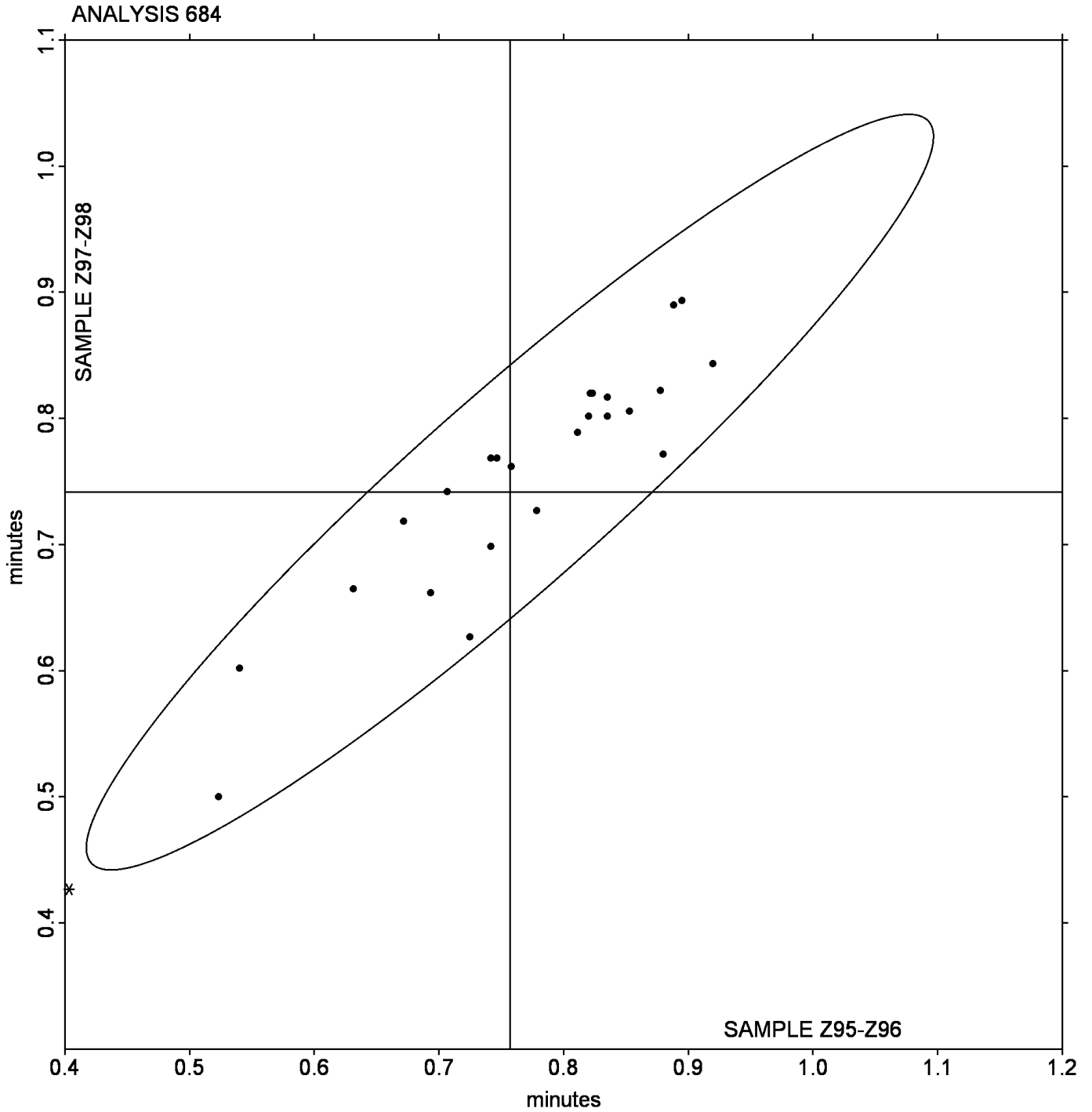
Samples Z95-Z96: EPDM compound, batch #1 & Z97-Z98: EPDM compound, batch #2

Analysis 684

MDR Vulcanization-Cure Time 10% (minutes)

Grand Mean Sample Z95-Z96 = 0.75687 minutes

Grand Mean Sample Z97-Z98 = 0.74160 minutes



Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2JU773		0.8667	0.0517	0.37	0.8533	0.0643	0.53	TP
3BR84R		0.9050	0.0900	0.65	0.8550	0.0659	0.55	MC
68FACW		0.8933	0.0783	0.56	0.8400	0.0509	0.42	MC
8UAAW4		0.9517	0.1367	0.98	0.9583	0.1693	1.40	MC
8XMAVF		0.6883	-0.1267	-0.91	0.6483	-0.1407	-1.16	MC
9JB4LT		0.6683	-0.1467	-1.05	0.7067	-0.0824	-0.68	MD
9TBQJT		1.0417	0.2267	1.63	0.9833	0.1943	1.61	MC
AGXPMZ		0.8050	-0.0100	-0.07	0.8017	0.0126	0.10	MC
BU2D7E		0.4983	-0.3167	-2.27	0.5533	-0.2357	-1.95	MC
BXFREZ		0.7517	-0.0633	-0.45	0.7750	-0.0141	-0.12	XX
CG99HE		0.9361	0.1211	0.87	0.8750	0.0860	0.71	MC
DAA2H9		0.7550	-0.0600	-0.43	0.7817	-0.0074	-0.06	TP
GKVGTB		0.8972	0.0822	0.59	0.8417	0.0526	0.44	MC
JEGL4R		0.9533	0.1383	0.99	0.8283	0.0393	0.33	MC
KNUTH3		0.7833	-0.0317	-0.23	0.7967	0.0076	0.06	MC
KVMAP		0.8500	0.0350	0.25	0.8139	0.0249	0.21	MC
MCTGK		0.7733	-0.0417	-0.30	0.7167	-0.0724	-0.60	TP
N6CAQJ		0.6433	-0.1717	-1.23	0.6783	-0.1107	-0.92	MD
PV66YE		0.9233	0.1083	0.78	0.8733	0.0843	0.70	TP
QNK4LP		0.9767	0.1617	1.16	0.9667	0.1776	1.47	MC
RN69MM		0.7548	-0.0602	-0.43	0.7345	-0.0546	-0.45	MC
RWP474		0.8933	0.0783	0.56	0.8467	0.0576	0.48	MD
U6UVHV		0.8617	0.0467	0.34	0.8317	0.0426	0.35	MC
ULYUJ2	*	0.4200	-0.3950	-2.84	0.4367	-0.3524	-2.92	MC
XNM4W		0.8700	0.0550	0.40	0.8050	0.0159	0.13	MC
YRMCFY		0.8767	0.0617	0.44	0.8267	0.0376	0.31	XX
YXQRW	*	0.7517	-0.0633	-0.45	0.6200	-0.1691	-1.40	MC
ZRYVTL		0.8300	0.0150	0.11	0.8450	0.0559	0.46	MC

Summary Statistics

Grand Means

0.81500 minutes

0.78905 minutes

Std Dev Btwn Labs

0.13923 minutes

0.12084 minutes

Statistics based on 28 of 28 reporting participants

Rubber Interlaboratory Testing Program
Analysis 685
MDR Vulcanization-Scorch Time, Ts1 (minutes)

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

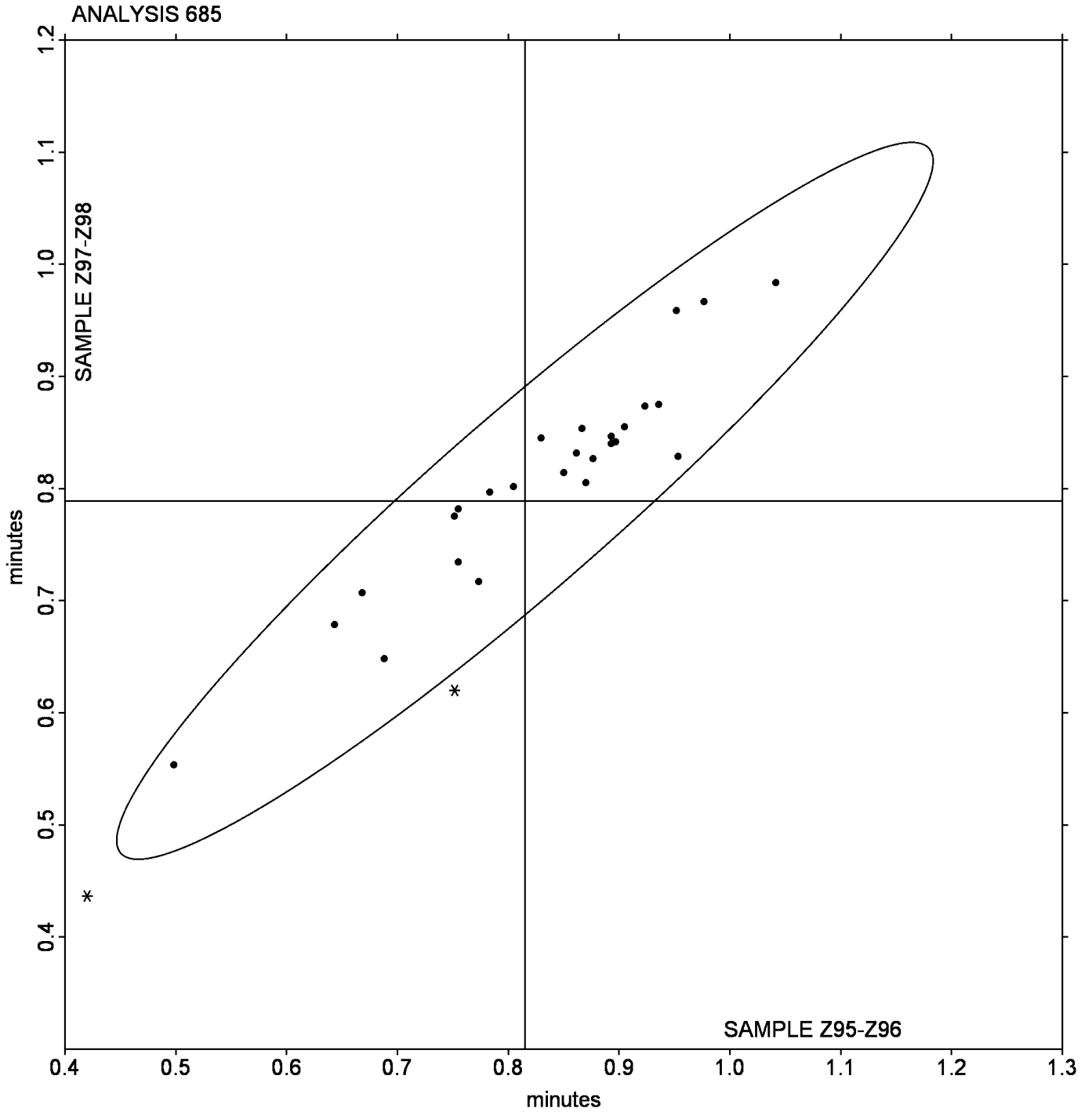
(XX) Instrument model not specified by lab

Analysis 685

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample Z95-Z96 = 0.81500 minutes

Grand Mean Sample Z97-Z98 = 0.78905 minutes



Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2NPAG2		1.663	-0.124	-1.13	1.753	-0.045	-0.44	MD
3RAC98		1.860	0.073	0.66	1.857	0.059	0.58	MC
4VAKRU		1.757	-0.030	-0.28	1.695	-0.103	-1.03	XX
69XTG9		1.833	0.046	0.42	1.813	0.015	0.15	MC
6FBDAP		1.867	0.080	0.72	1.818	0.020	0.20	MD
8RA6G3		1.782	-0.005	-0.05	1.818	0.020	0.20	MC
8RK6BA		1.842	0.055	0.50	1.817	0.019	0.19	MC
A6RRXR		1.913	0.126	1.15	1.900	0.102	1.01	MC
AKNTN6		1.798	0.011	0.10	1.816	0.017	0.17	MC
ATQBKF		1.708	-0.079	-0.72	1.743	-0.055	-0.54	MC
AZZKFJ		1.793	0.006	0.06	1.790	-0.008	-0.08	MC
CZ2ELY		1.833	0.046	0.42	1.856	0.058	0.57	MC
DZHQ44		1.869	0.082	0.75	1.842	0.044	0.43	MC
FCWVQR		1.648	-0.139	-1.26	1.652	-0.146	-1.46	TP
HCUNW3		1.628	-0.159	-1.44	1.593	-0.205	-2.04	MD
HDWAU		1.665	-0.122	-1.11	1.702	-0.096	-0.96	TP
HQ7XA6		1.747	-0.040	-0.37	1.803	0.005	0.05	MC
HQ8BQT		1.900	0.113	1.03	1.902	0.104	1.03	MC
JHFHBT		1.807	0.020	0.18	1.895	0.097	0.97	XX
L8ECQQ		1.798	0.011	0.10	1.875	0.077	0.77	MC
NYWJFT		1.890	0.103	0.94	1.897	0.099	0.98	MC
PJBZ6G		1.842	0.055	0.50	1.858	0.060	0.60	TP
Q26TAU		1.950	0.163	1.48	1.903	0.105	1.05	MC
RTC3J		1.792	0.005	0.04	1.740	-0.058	-0.58	MC
VTFLKA		1.772	-0.015	-0.14	1.793	-0.005	-0.05	TP
XGGUT4		1.950	0.163	1.48	1.907	0.109	1.08	MC
Y9K42Y		1.610	-0.177	-1.61	1.737	-0.061	-0.61	MD
YPL2UW	*	1.453	-0.334	-3.04	1.468	-0.330	-3.28	MC
ZK4MXV		1.817	0.030	0.27	1.838	0.040	0.40	MC
ZZG4UP		1.827	0.040	0.36	1.860	0.062	0.62	MC

Analysis 686

MDR Vulcanization-Cure Time 50% (minutes)

Summary Statistics

Grand Means

1.7872 minutes

1.7980 minutes

Std Dev Btwn Labs

0.1100 minutes

0.1005 minutes

Statistics based on 30 of 30 reporting participants

Samples Z95-Z96: EPDM compound, batch #1 & Z97-Z98: EPDM compound, batch #2

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2NZ867		4.147	-0.560	-1.77	4.052	-0.513	-1.73	TP
8F48RU		5.207	0.500	1.58	4.915	0.350	1.18	MC
A89X23		5.270	0.563	1.78	5.117	0.552	1.86	MC
CRX2ZQ		4.352	-0.355	-1.12	4.425	-0.140	-0.47	MD
ERJFD8		4.680	-0.027	-0.08	4.542	-0.023	-0.08	TP
EWDJVC		4.590	-0.117	-0.37	4.397	-0.168	-0.57	MC
F2GD48		4.343	-0.364	-1.15	4.442	-0.123	-0.42	XX
G2EFRG		4.430	-0.277	-0.87	4.353	-0.212	-0.71	MD
GPP7ZP		4.708	0.001	0.00	4.630	0.065	0.22	TP
GRRX6V		4.488	-0.219	-0.69	4.407	-0.158	-0.53	XX
HUUWU		4.825	0.118	0.37	4.561	-0.004	-0.01	MC
J98BNK		4.490	-0.217	-0.68	4.375	-0.190	-0.64	MD
JKN8WW		5.028	0.321	1.01	5.062	0.497	1.67	MC
LEWK9T		4.631	-0.076	-0.24	4.400	-0.166	-0.56	MC
LP3WTB		4.342	-0.365	-1.15	4.217	-0.348	-1.17	MC
M3A76P		4.647	-0.060	-0.19	4.456	-0.110	-0.37	MC
M8APH4		4.748	0.041	0.13	4.698	0.133	0.45	MC
MVGTTP		4.298	-0.409	-1.29	4.293	-0.272	-0.91	MC
QLVYNC		5.375	0.668	2.11	5.195	0.630	2.12	MC
REFFHG		5.078	0.371	1.17	4.985	0.420	1.41	MC
RKE86U		5.107	0.400	1.26	5.035	0.470	1.58	MC
RVQFQ9	X	0.247	-4.460	-14.08	0.261	-4.304	-14.48	XX
TK8243		4.618	-0.089	-0.28	4.445	-0.120	-0.40	MC
VPGBPB		4.392	-0.315	-0.99	4.423	-0.142	-0.48	TP
WWCZL		5.085	0.378	1.19	4.618	0.053	0.18	MD
Y2ZYBK		4.708	0.002	0.01	4.511	-0.054	-0.18	MC
YHMCN	*	4.713	0.006	0.02	4.118	-0.447	-1.50	MC
ZLCXGU		4.877	0.170	0.54	4.800	0.235	0.79	MC
ZQCJMA		4.537	-0.170	-0.54	4.462	-0.103	-0.35	MC
ZUPFXD		4.783	0.076	0.24	4.457	-0.108	-0.36	MC

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

		Summary Statistics		
Grand Means	4.7068 minutes		4.5651 minutes	
Std Dev Btwn Labs	0.3169 minutes		0.2973 minutes	
Statistics based on 29 of 30 reporting participants				

Samples Z95-Z96: EPDM compound, batch #1 & Z97-Z98: EPDM compound, batch #2

Comments on assigned Data Flags for Test #687

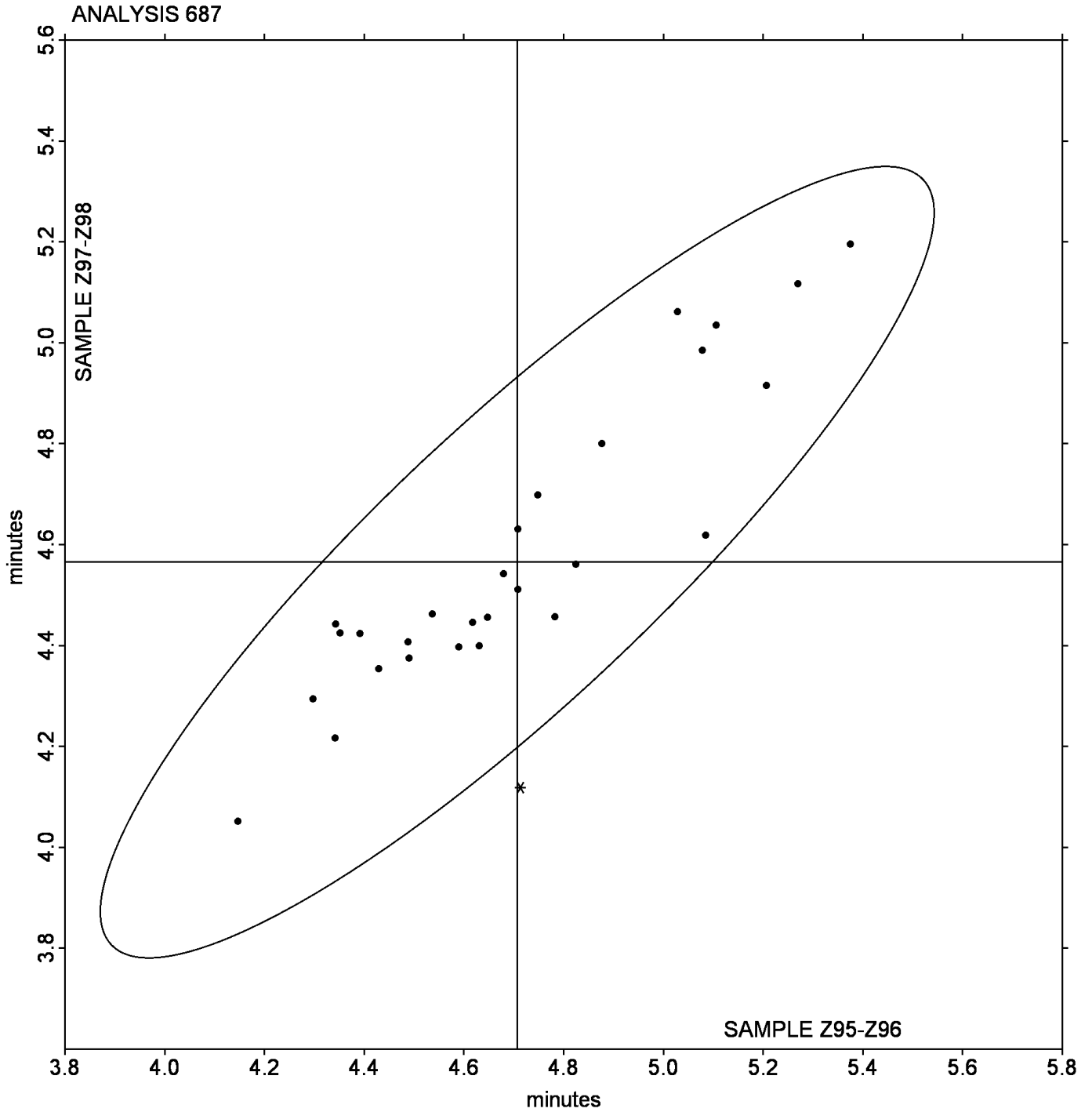
RVQFQ9 (X) - Data for all Samples are low.

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

Grand Mean Sample Z95-Z96 = 4.7068 minutes

Grand Mean Sample Z97-Z98 = 4.5651 minutes



Rubber Interlaboratory Testing Program

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2WUEUP		5.447	-0.175	-0.22	5.040	-0.204	-0.26	MC
42VU9Y		5.892	0.270	0.34	5.407	0.162	0.20	MC
43MV7B		4.197	-1.425	-1.80	4.082	-1.163	-1.45	MC
63TBJM		5.128	-0.494	-0.62	5.123	-0.121	-0.15	MC
97XVF4	*	7.237	1.615	2.04	7.480	2.236	2.80	MC
9JMU KD		4.835	-0.787	-0.99	4.722	-0.523	-0.65	TP
9UAM4W		5.268	-0.354	-0.45	4.803	-0.441	-0.55	MD
9ZKRAE		5.617	-0.005	-0.01	5.618	0.374	0.47	XX
ARVCB3		4.760	-0.862	-1.09	4.592	-0.653	-0.82	XX
B3A3TR		6.770	1.148	1.45	6.403	1.159	1.45	MC
EVG3PH		5.025	-0.597	-0.75	4.555	-0.689	-0.86	MC
F7F4WJ		5.402	-0.220	-0.28	5.173	-0.071	-0.09	MD
FNVH8N		5.068	-0.554	-0.70	4.992	-0.253	-0.32	MC
GJYMRE		6.323	0.701	0.88	5.340	0.096	0.12	MC
HPVJVQ		5.502	-0.120	-0.15	4.732	-0.513	-0.64	TP
L7TTCT		4.895	-0.727	-0.92	4.643	-0.601	-0.75	MC
LJ68MP		5.720	0.098	0.12	5.018	-0.226	-0.28	MC
LMU UW		6.291	0.669	0.84	6.086	0.842	1.05	XX
NP66BM		4.827	-0.795	-1.00	4.562	-0.683	-0.85	MC
NPKPVH		6.627	1.005	1.27	5.727	0.482	0.60	TP
RC93UN		5.468	-0.154	-0.19	4.920	-0.325	-0.41	MC
RRXZB6		7.188	1.566	1.97	6.702	1.457	1.82	TP
UKTCR9		5.208	-0.414	-0.52	4.661	-0.583	-0.73	MD
UM3DW		4.605	-1.017	-1.28	4.477	-0.768	-0.96	MC
UMGK6P		5.515	-0.107	-0.13	4.973	-0.271	-0.34	MC
VHL9PL		6.703	1.081	1.36	6.502	1.257	1.57	MC
VV2YZ2		6.815	1.193	1.50	6.528	1.284	1.61	MD
X7ZNEL		5.413	-0.209	-0.26	4.638	-0.606	-0.76	MC
XR XQ3U		5.787	0.165	0.21	5.082	-0.163	-0.20	MC
ZC2VVT		5.125	-0.497	-0.63	4.748	-0.496	-0.62	MC

**Rubber Interlaboratory Testing Program
Analysis 688****MDR Vulcanization: Minimum Torque (lbf.in)**

Summary Statistics

Grand Means

5.6219 lbf.in

5.2443 lbf.in

Std Dev Btwn Labs

0.7931 lbf.in

0.7997 lbf.in

Statistics based on 30 of 30 reporting participants

Summary Statistics in SI Units

Grand Means

6.3519 dN.m

5.9253 dN.m

Std Dev Btwn Labs

0.8961 dN.m

0.9035 dN.m

Statistics based on 30 of 30 reporting participants

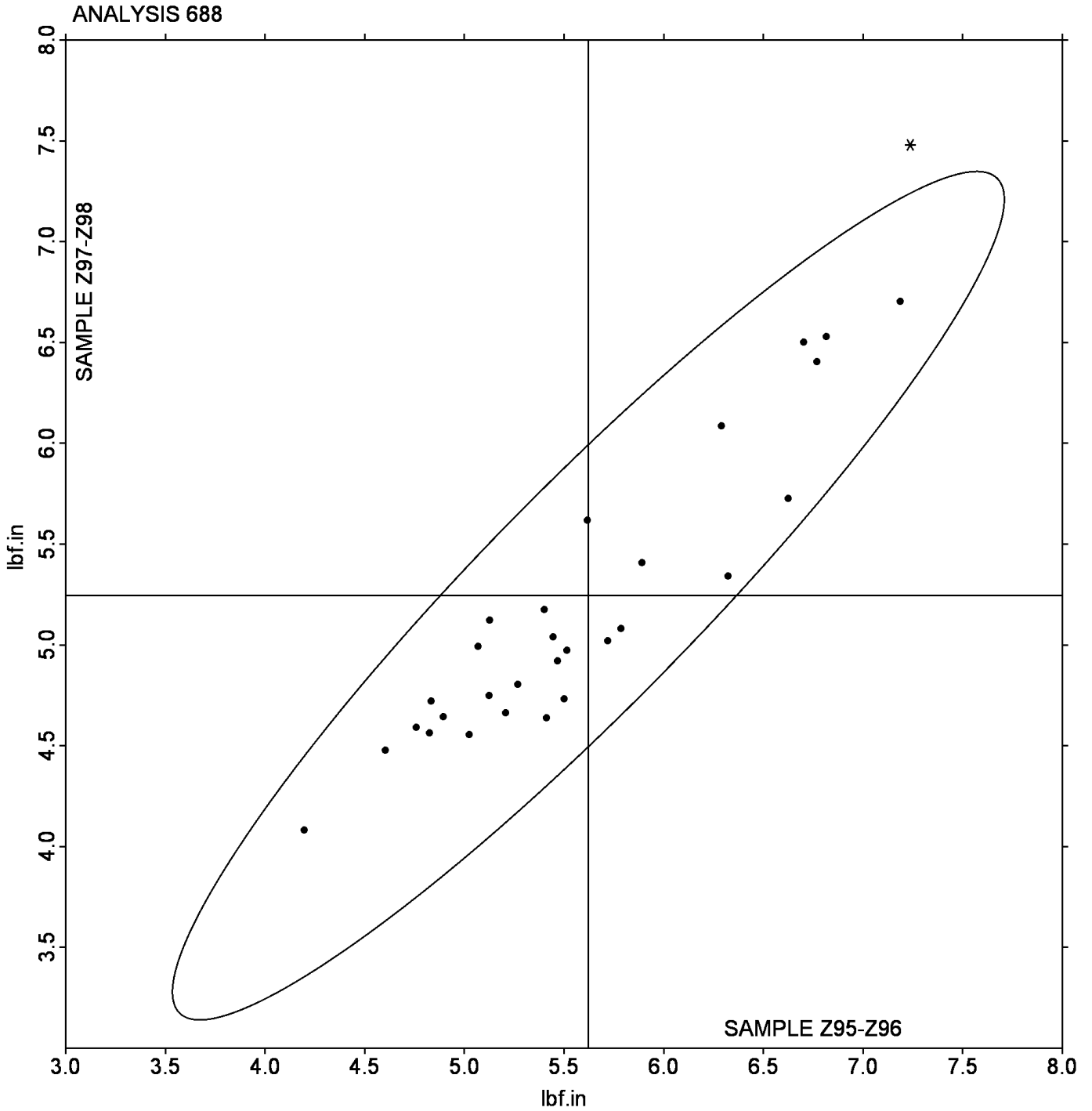
Samples Z95-Z96: EPDM compound, batch #1 & Z97-Z98: EPDM compound, batch #2

Analysis 688

MDR Vulcanization: Minimum Torque (lbf.in)

Grand Mean Sample Z95-Z96 = 5.6219 lbf.in

Grand Mean Sample Z97-Z98 = 5.2443 lbf.in



Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample Z95-Z96			Sample Z97-Z98			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2PDQE4		14.78	0.46	0.48	14.74	0.40	0.44	MD
38N43C		15.06	0.74	0.77	14.93	0.59	0.65	MC
4UCTKA		12.28	-2.03	-2.11	12.28	-2.05	-2.24	MC
6QYJUV		13.59	-0.73	-0.75	13.59	-0.74	-0.81	MC
84Y3FD		14.28	-0.04	-0.04	14.03	-0.31	-0.33	MC
ALRC3L		15.77	1.45	1.50	15.61	1.27	1.38	TP
BU9EDZ		12.42	-1.90	-1.97	12.92	-1.41	-1.54	MC
BYUHXX		14.01	-0.31	-0.32	13.62	-0.71	-0.78	TP
EBCVK3		14.09	-0.23	-0.24	14.55	0.21	0.23	MC
EPHFBN		13.86	-0.46	-0.47	13.58	-0.76	-0.82	MC
FTA7U4		13.54	-0.78	-0.81	13.19	-1.15	-1.25	MC
FVAD3W		15.46	1.14	1.18	15.68	1.34	1.46	MC
JB9QKP	X	5.50	-8.82	-9.14	4.73	-9.60	-10.47	TP
JFD3XF		15.00	0.68	0.70	14.77	0.44	0.48	MD
JHY3YJ		13.51	-0.81	-0.84	14.00	-0.34	-0.37	MC
JMVL33		13.35	-0.97	-1.00	13.44	-0.90	-0.98	TP
JWHEM		12.56	-1.76	-1.82	13.04	-1.30	-1.42	MC
KXHT34		15.47	1.15	1.20	15.27	0.93	1.02	XX
LXMU2		14.19	-0.13	-0.14	14.23	-0.11	-0.12	MC
NDY8ME		14.90	0.58	0.60	14.98	0.64	0.70	MC
PMKHM		14.72	0.40	0.42	14.49	0.15	0.17	MC
RKE3J7		14.46	0.14	0.14	14.18	-0.15	-0.17	MC
TPT2VB		14.18	-0.14	-0.15	13.85	-0.49	-0.53	MD
V8TJCZ		14.28	-0.04	-0.04	14.89	0.55	0.60	MC
WNXT2V		16.40	2.08	2.16	16.42	2.08	2.27	MC
WP3LF4	*	13.90	-0.42	-0.44	14.90	0.56	0.61	XX
XHMPGT		14.77	0.45	0.47	14.43	0.09	0.10	MC
XKUYJY		14.83	0.51	0.53	14.41	0.07	0.08	MC
XPMXZF		14.49	0.17	0.17	14.42	0.09	0.09	XX
ZYN8BW		15.12	0.80	0.83	15.33	0.99	1.08	MD

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Summary Statistics

Grand Means

14.320 lbf.in

14.335 lbf.in

Std Dev Btwn Labs

0.965 lbf.in

0.917 lbf.in

Statistics based on 29 of 30 reporting participants

Summary Statistics in SI Units

Grand Means

16.179 dN.m

16.197 dN.m

Std Dev Btwn Labs

1.090 dN.m

1.036 dN.m

Statistics based on 29 of 30 reporting participants

Samples Z95-Z96: EPDM compound, batch #1 & Z97-Z98: EPDM compound, batch #2

Comments on assigned Data Flags for Test #689

JB9QKP (X) - Data for all Samples are low. Lab may have reported minimum torque data.

Analysis 689

MDR Vulcanization: Maximum Torque (lbf.in)

Grand Mean Sample Z95-Z96 = 14.320 lbf.in

Grand Mean Sample Z97-Z98 = 14.335 lbf.in

