

Rubber Interlaboratory Testing Program

Summary Report #227- 1st Qtr 2026

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606	Ultimate Elongation: Precured Rubber Samples	690	RPA Rheological Properties: Part A - G' at 20Hz
607	Stress at 300% Elongation: Precured Samples	691	RPA Rheological Properties: Part A - G'' at 20Hz
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620	Hardness (Type A): Precured Rubber Samples	696	RPA Rheological Properties: Part B - G'' at 1.0Hz
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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 industries including rubber, plastics, fasteners and metals, containerboard, paper, color, and wine, 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 100 countries, currently participate in CTS programs.

If there are any questions on the report or testing program, please contact:

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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)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2M3ZPK		3,165.0	-50.7	-0.32	3,205.0	-27.2	-0.18
2U47PG		3,280.0	64.3	0.41	3,310.0	77.8	0.51
2WD3BL		2,956.0	-259.7	-1.66	2,963.5	-268.7	-1.75
3GVMQM		3,343.1	127.5	0.82	3,328.6	96.4	0.63
3M2MGJ		3,132.8	-82.8	-0.53	3,277.9	45.6	0.30
3QWGEK		3,307.0	91.3	0.59	3,136.0	-96.2	-0.63
43CGVD		2,900.8	-314.9	-2.02	2,915.3	-317.0	-2.07
4MG72F		3,238.7	23.0	0.15	3,179.3	-53.0	-0.35
4Q2YDH		3,504.0	288.3	1.85	3,506.5	274.3	1.79
4QVWBG		3,361.5	145.8	0.93	3,434.5	202.3	1.32
6LJ9BK		3,095.0	-120.7	-0.77	3,130.0	-102.2	-0.67
7HYGYH		3,261.2	45.5	0.29	3,294.6	62.3	0.41
7URZFA		3,292.5	76.8	0.49	3,417.5	185.3	1.21
8HUQYD		3,242.5	26.8	0.17	3,219.5	-12.7	-0.08
8LWK4A		3,281.0	65.3	0.42	3,310.0	77.8	0.51
97C7FG		2,990.0	-225.7	-1.45	2,947.0	-285.2	-1.86
9JKB6A		3,146.2	-69.5	-0.45	3,043.0	-189.3	-1.23
9TRQCH		3,314.1	98.5	0.63	3,308.3	76.1	0.50
9YT38E		3,161.9	-53.8	-0.34	3,169.1	-63.1	-0.41
A6XENC		3,430.5	214.8	1.38	3,407.5	175.3	1.14
AL79H7		3,325.7	110.1	0.71	3,290.9	58.7	0.38
BN64EE		3,422.2	206.5	1.32	3,395.4	163.1	1.06
BV9XNA		3,190.0	-25.7	-0.16	3,182.0	-50.2	-0.33
BZH4B9		3,231.0	15.3	0.10	3,337.6	105.4	0.69
DALZ8A		2,935.5	-280.2	-1.80	2,984.5	-247.7	-1.61
DRYK4D		3,420.0	204.3	1.31	3,345.0	112.8	0.73
DWRNN6		3,251.5	35.8	0.23	3,325.0	92.8	0.60
E67PU7		3,244.0	28.3	0.18	3,092.0	-140.2	-0.91
EEQ3MB		3,203.5	-12.2	-0.08	3,360.6	128.3	0.84
EJ34RE	X	3,225.5	9.8	0.06	3,526.5	294.3	1.92
FAR27E		3,193.0	-22.6	-0.15	3,290.9	58.7	0.38
GFRZU9		3,261.0	45.3	0.29	3,246.5	14.3	0.09
GT2G3Y		3,229.5	13.8	0.09	3,305.5	73.3	0.48
HA78HA		3,158.5	-57.2	-0.37	3,154.0	-78.2	-0.51
HCCPG6		3,184.0	-31.7	-0.20	3,189.0	-43.2	-0.28
JC4778		2,928.0	-287.7	-1.84	2,966.0	-266.2	-1.73
JC8VB4		3,288.8	73.1	0.47	3,280.1	47.8	0.31
L7E8T4		3,149.5	-66.2	-0.42	3,264.1	31.9	0.21



Rubber Interlaboratory Testing Program
Analysis 605
Tensile Strength (psi)

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1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LEM2MW		3,190.1	-25.5	-0.16	3,189.4	-42.8	-0.28
M37LAV	*	2,871.8	-343.9	-2.20	3,089.3	-142.9	-0.93
M86TYZ		3,300.0	84.3	0.54	3,270.0	37.8	0.25
MA8QAR		3,325.0	109.3	0.70	3,347.5	115.3	0.75
NTB6XW		3,245.5	29.8	0.19	3,272.5	40.3	0.26
NXACMZ		3,360.0	144.3	0.92	3,525.0	292.8	1.91
PEBLVY		3,318.5	102.8	0.66	3,234.0	1.8	0.01
PN4RZY	X	3,862.0	646.3	4.14	3,726.5	494.3	3.22
PTD6GX		3,004.0	-211.7	-1.36	3,035.5	-196.7	-1.28
PZRRQ2		3,091.5	-124.2	-0.80	2,951.5	-280.7	-1.83
QKD6HV		3,470.5	254.8	1.63	3,479.5	247.3	1.61
QTRUG4	*	3,105.8	-109.9	-0.70	3,371.6	139.4	0.91
RJGP6X		3,347.0	131.3	0.84	3,319.5	87.3	0.57
RNDGDV		3,264.5	48.8	0.31	3,276.0	43.8	0.29
RVUCUP		3,104.0	-111.7	-0.72	3,159.5	-72.7	-0.47
RYU8TR		2,875.4	-340.3	-2.18	2,913.8	-318.4	-2.07
TZZ9TV		3,071.7	-144.0	-0.92	3,162.2	-70.1	-0.46
UEWNTP		3,230.7	15.1	0.10	3,172.0	-60.2	-0.39
V4UPHV		3,316.5	100.8	0.65	3,266.5	34.3	0.22
V728GQ	X	3,593.5	377.8	2.42	3,262.5	30.3	0.20
VF79ZQ		2,890.0	-325.7	-2.09	2,935.0	-297.2	-1.94
W7YQ3R		3,327.0	111.3	0.71	3,239.5	7.3	0.05
WB6JWN		3,330.0	114.3	0.73	3,324.5	92.3	0.60
WGWT7L		3,530.5	314.9	2.02	3,413.0	180.8	1.18
WKFLHN		3,254.7	39.0	0.25	3,294.6	62.3	0.41
WP8TZX		3,055.5	-160.2	-1.03	3,058.5	-173.7	-1.13
X2JFNN		3,301.0	85.3	0.55	3,410.5	178.3	1.16
X4JXFN		3,386.7	171.0	1.10	3,408.4	176.2	1.15

		Summary Statistics	
Grand Means	3,215.67 psi	3,232.25 psi	
Std Dev Btwn Labs	156.07 psi	153.46 psi	
Statistics based on 63 of 66 reporting participants			



Rubber Interlaboratory Testing Program
Analysis 605
Tensile Strength (psi)

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		Summary Statistics in SI Units	
Grand Means	22.171 MPa	22.290 MPa	
Stnd Dev Btwn Labs	1.076 MPa	1.060 MPa	
Statistics based on 63 of 66 reporting participants			

Samples A61-A62: Polyisoprene Compound & A63-A64: Polyisoprene Compound

Comments on Assigned Data Flags for Test #605

- EJ34RE (X) - Inconsistent in testing between samples.
- PN4RZY (X) - Data for all samples are high. Possible Systematic Error.
- V728GQ (X) - Inconsistent in testing between samples.

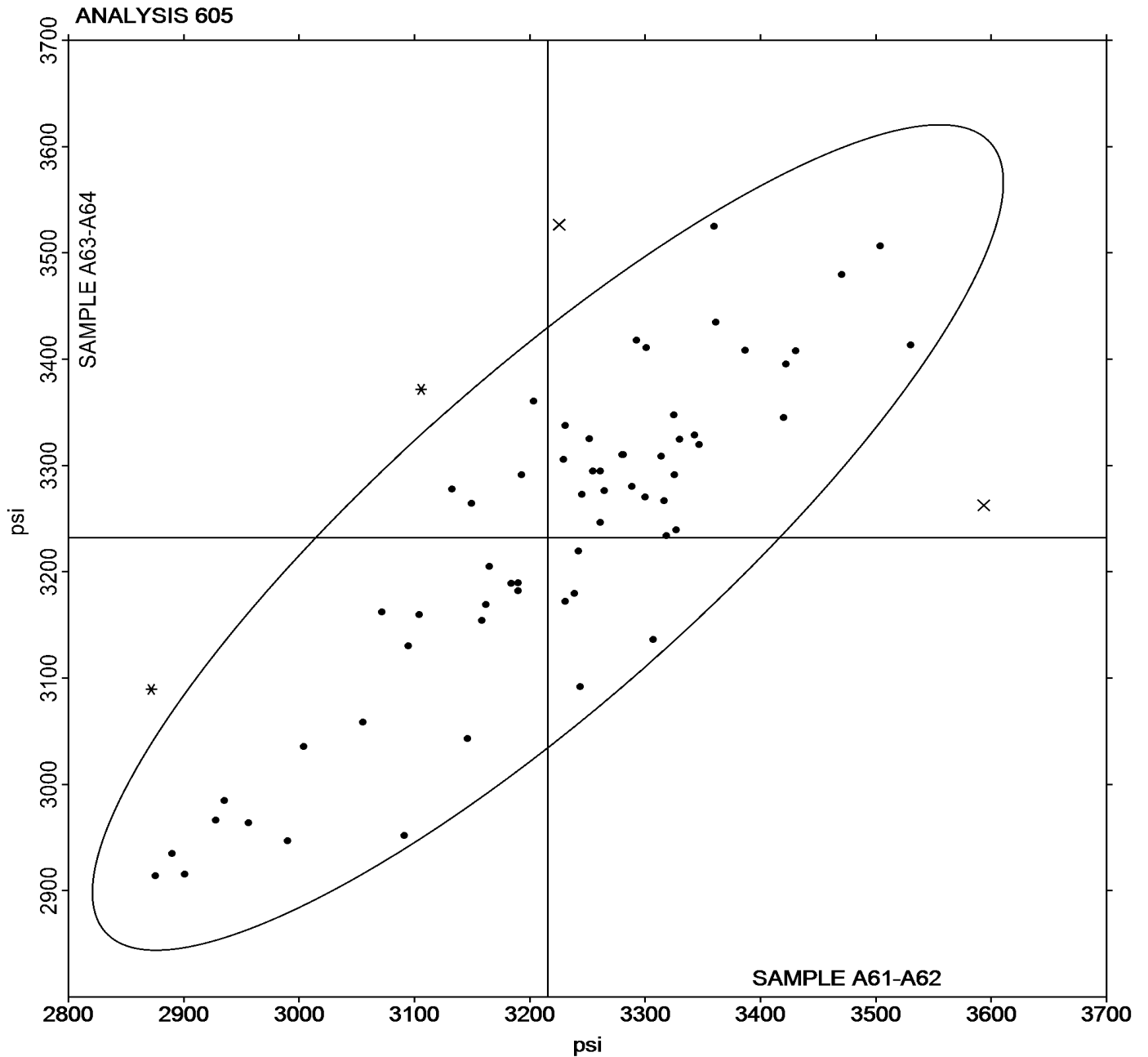


Rubber Interlaboratory Testing Program
Analysis 605
Tensile Strength (psi)

Report #227
1st Qtr 2026

Grand Mean Sample A61-A62 = 3,215.67 psi

Grand Mean Sample A63-A64 = 3,232.25 psi





Rubber Interlaboratory Testing Program
Analysis 606
Ultimate Elongation (percent)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2M3ZPK		554.6	1.7	0.05	537.7	-5.0	-0.14
2U47PG		542.9	-10.1	-0.29	535.9	-6.8	-0.19
2WD3BL		544.5	-8.4	-0.24	557.5	14.8	0.42
3GVMQM		573.5	20.6	0.59	559.0	16.3	0.47
3M2MGJ		548.0	-4.9	-0.14	535.0	-7.7	-0.22
3QWGEK	X	521.0	-31.9	-0.92	450.0	-92.7	-2.65
43CGVD		509.4	-43.5	-1.25	495.5	-47.2	-1.35
4MG72F		572.0	19.1	0.55	550.5	7.8	0.22
4Q2YDH		574.0	21.1	0.60	553.5	10.8	0.31
4QVWBG		580.0	27.1	0.78	572.0	29.3	0.84
6LJ9BK		567.5	14.6	0.42	562.0	19.3	0.55
7HYGYH		561.0	8.1	0.23	550.5	7.8	0.22
7URZFA		573.0	20.1	0.58	563.5	20.8	0.60
8HUQYD		613.0	60.1	1.72	612.5	69.8	2.00
8LWK4A		574.0	21.1	0.60	571.5	28.8	0.82
97C7FG		507.5	-45.4	-1.30	496.0	-46.7	-1.33
9JKB6A		501.5	-51.4	-1.48	479.7	-63.0	-1.80
9TRQCH		573.0	20.1	0.58	563.5	20.8	0.60
9YT38E		514.0	-38.9	-1.12	499.5	-43.2	-1.23
A6XENC		585.0	32.1	0.92	581.0	38.3	1.10
AL79H7		526.5	-26.4	-0.76	520.5	-22.2	-0.63
BN64EE		575.0	22.1	0.63	548.5	5.8	0.17
BV9XNA		545.5	-7.4	-0.21	538.0	-4.7	-0.13
BZH4B9		624.5	71.6	2.05	616.0	73.3	2.10
DALZ8A		545.0	-7.9	-0.23	539.5	-3.2	-0.09
DRYK4D		574.0	21.1	0.60	569.0	26.3	0.75
DWRNN6		605.4	52.5	1.51	579.9	37.2	1.06
E67PU7		581.0	28.1	0.81	561.0	18.3	0.52
EEQ3MB		556.7	3.8	0.11	555.7	13.0	0.37
EJ34RE	*	497.0	-55.9	-1.60	516.5	-26.2	-0.75
FAR27E	*	533.5	-19.4	-0.56	552.5	9.8	0.28
GFRZU9		537.5	-15.4	-0.44	523.0	-19.7	-0.56
GT2G3Y		517.5	-35.4	-1.02	504.5	-38.2	-1.09
HA78HA	*	622.5	69.6	2.00	582.5	39.8	1.14
HCCPG6		549.0	-3.9	-0.11	531.5	-11.2	-0.32
JC4778		512.0	-40.9	-1.17	502.0	-40.7	-1.16
JC8VB4		537.5	-15.4	-0.44	542.5	-0.2	0.00
L7E8T4		533.0	-19.9	-0.57	521.0	-21.7	-0.62



Rubber Interlaboratory Testing Program
Analysis 606
Ultimate Elongation (percent)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
LEM2MW		561.5	8.6	0.25	549.0	6.3	0.18
M37LAV		489.0	-63.9	-1.83	486.0	-56.7	-1.62
M86TYZ		580.0	27.1	0.78	557.0	14.3	0.41
MA8QAR		553.5	0.6	0.02	547.5	4.8	0.14
NTB6XW		604.5	51.6	1.48	603.5	60.8	1.74
NXACMZ	*	631.5	78.6	2.25	636.0	93.3	2.67
PEBLVY		579.0	26.1	0.75	573.0	30.3	0.87
PN4RZY		576.5	23.6	0.68	554.0	11.3	0.32
PTD6GX		473.0	-79.9	-2.29	477.0	-65.7	-1.88
PZRRQ2		518.5	-34.4	-0.99	500.0	-42.7	-1.22
QKD6HV		527.0	-25.9	-0.74	515.5	-27.2	-0.78
QTRUG4		597.9	44.9	1.29	601.2	58.5	1.67
RJGP6X		559.0	6.0	0.17	550.9	8.2	0.24
RNDGDV		598.0	45.1	1.29	576.5	33.8	0.97
RVUCUP		514.0	-38.9	-1.12	492.5	-50.2	-1.43
RYU8TR		485.0	-67.9	-1.95	481.2	-61.5	-1.76
TZZ9TV		528.1	-24.8	-0.71	509.6	-33.1	-0.94
UEWNTP	X	614.0	61.1	1.75	643.5	100.8	2.88
V4UPHV		543.0	-9.9	-0.28	526.5	-16.2	-0.46
V728GQ		570.0	17.1	0.49	537.0	-5.7	-0.16
VF79ZQ		533.5	-19.4	-0.56	502.0	-40.7	-1.16
W7YQ3R		564.5	11.6	0.33	567.5	24.8	0.71
WB6JWN		518.5	-34.4	-0.99	497.0	-45.7	-1.31
WGWT7L		572.4	19.4	0.56	561.5	18.8	0.54
WKFLHN		530.0	-22.9	-0.66	531.3	-11.4	-0.33
WP8TZX		548.5	-4.4	-0.13	530.0	-12.7	-0.36
X2JFNN		556.5	3.6	0.10	562.0	19.3	0.55
X4JXFN		533.0	-19.9	-0.57	525.5	-17.2	-0.49

		Summary Statistics	
Grand Means	552.93 percent	542.67 percent	
Std Dev Btwn Labs	34.85 percent	35.00 percent	
Statistics based on 64 of 66 reporting participants			

Samples A61-A62: Polyisoprene Compound & A63-A64: Polyisoprene Compound



Rubber Interlaboratory Testing Program
Analysis 606
Ultimate Elongation (percent)

Report #227
1st Qtr 2026

Comments on Assigned Data Flags for Test #606

3QWGEK (X) - Inconsistent in testing between samples.

UEWNTP (X) - Data for sample group A63-A64 are high.

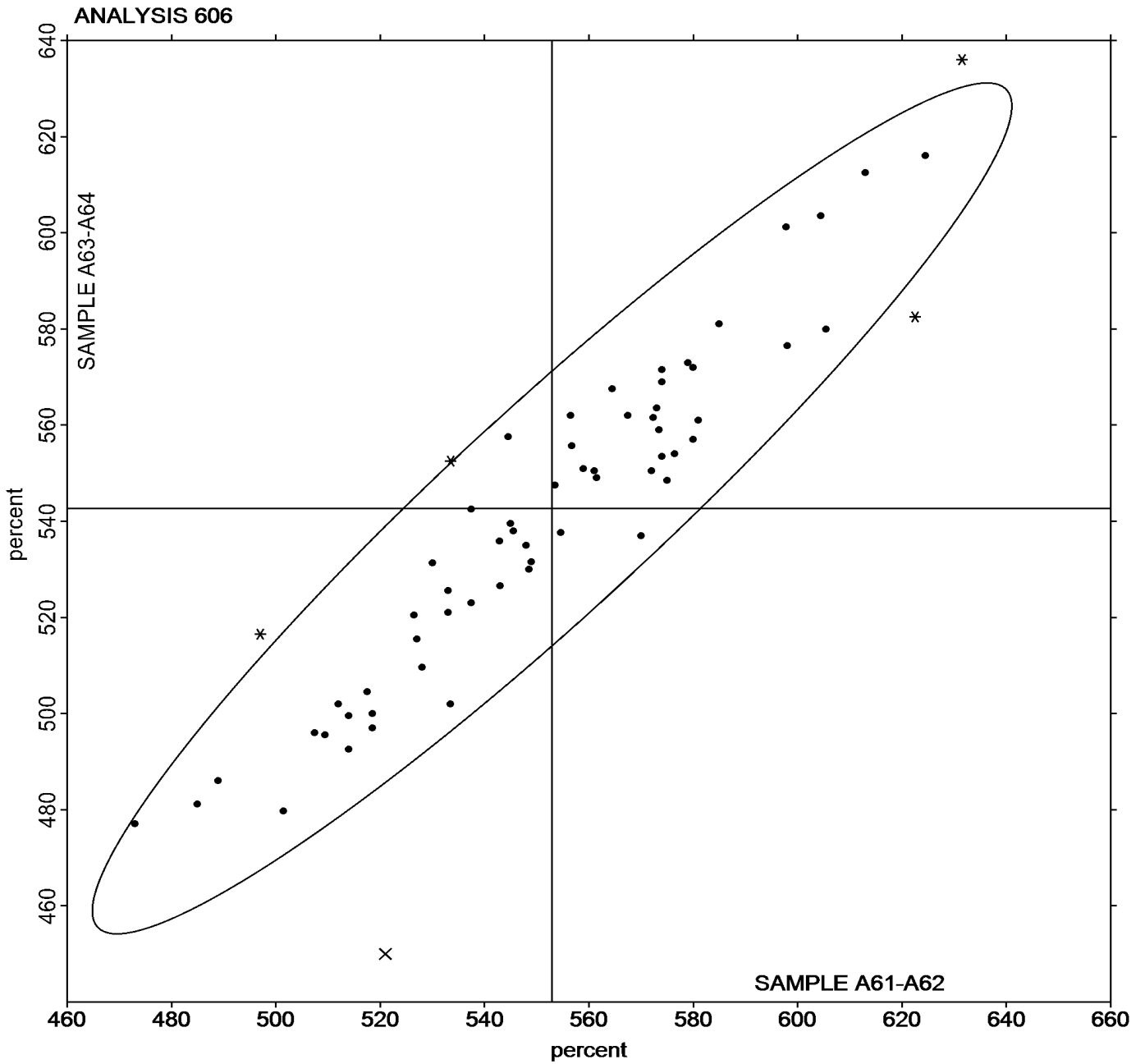


Rubber Interlaboratory Testing Program
Analysis 606
Ultimate Elongation (percent)

Report #227
1st Qtr 2026

Grand Mean Sample A61-A62 = 552.93 percent

Grand Mean Sample A63-A64 = 542.67 percent





Rubber Interlaboratory Testing Program

Report #227

Analysis 607

1st Qtr 2026

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2M3ZPK		1,350.0	-46.5	-0.30	1,520.0	49.2	0.27
2U47PG		1,500.0	103.5	0.68	1,560.0	89.2	0.49
2WD3BL	*	1,069.0	-327.5	-2.14	1,013.0	-457.8	-2.54
3GVMQM		1,402.5	6.1	0.04	1,449.7	-21.1	-0.12
3M2MGJ		1,381.5	-15.0	-0.10	1,509.9	39.1	0.22
3QWGEK	X	1,521.5	125.0	0.82	1,864.5	393.7	2.18
43CGVD		1,415.6	19.1	0.13	1,559.9	89.1	0.49
4Q2YDH		1,467.0	70.5	0.46	1,586.0	115.2	0.64
4QVWBG		1,378.0	-18.5	-0.12	1,500.5	29.7	0.16
6LJ9BK		1,274.3	-122.2	-0.80	1,300.0	-170.8	-0.95
7HYGYH		1,435.9	39.4	0.26	1,519.3	48.5	0.27
7URZFA		1,190.5	-206.0	-1.35	1,182.0	-288.8	-1.60
8HUQYD	*	988.0	-408.5	-2.68	979.5	-491.3	-2.72
8LWK4A		1,369.0	-27.5	-0.18	1,498.5	27.7	0.15
97C7FG		1,637.5	241.0	1.58	1,644.0	173.2	0.96
9JKB6A		1,464.1	67.6	0.44	1,553.0	82.2	0.46
9TRQCH		1,406.2	9.7	0.06	1,402.5	-68.3	-0.38
9YT38E	*	1,104.1	-292.4	-1.91	991.7	-479.1	-2.65
A6XENC		1,370.0	-26.5	-0.17	1,453.5	-17.3	-0.10
AL79H7		1,533.1	136.6	0.89	1,599.1	128.3	0.71
BN64EE		1,473.6	77.1	0.51	1,597.6	126.8	0.70
BV9XNA		1,465.0	68.5	0.45	1,500.0	29.2	0.16
BZH4B9		1,176.2	-220.3	-1.44	1,346.7	-124.1	-0.69
DALZ8A		1,254.5	-142.0	-0.93	1,288.5	-182.3	-1.01
DRYK4D		1,436.5	40.0	0.26	1,432.5	-38.3	-0.21
DWRNN6		1,247.0	-149.5	-0.98	1,389.0	-81.8	-0.45
EEQ3MB		1,423.7	27.3	0.18	1,411.1	-59.7	-0.33
EJ34RE		1,628.0	231.5	1.52	1,749.0	278.2	1.54
FAR27E		1,367.7	-28.8	-0.19	1,378.6	-92.2	-0.51
GFRZU9		1,446.0	49.5	0.32	1,544.0	73.2	0.41
GT2G3Y		1,547.0	150.5	0.99	1,695.0	224.2	1.24
HA78HA	*	1,132.5	-264.0	-1.73	1,330.5	-140.3	-0.78
HCCPG6		1,423.0	26.5	0.17	1,451.0	-19.8	-0.11
JC4778		1,358.5	-38.0	-0.25	1,541.5	70.7	0.39
JC8VB4		1,466.3	69.9	0.46	1,572.2	101.4	0.56
L7E8T4		1,427.2	30.7	0.20	1,620.8	150.0	0.83
LEM2MW		1,352.5	-44.0	-0.29	1,467.8	-3.0	-0.02
M37LAV		1,544.7	148.2	0.97	1,747.7	276.9	1.53



Rubber Interlaboratory Testing Program

Report #227

Analysis 607

1st Qtr 2026

Stress at 300% Elongation (psi)

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
MA8QAR		1,454.0	57.5	0.38	1,513.5	42.7	0.24
NTB6XW	*	1,004.0	-392.5	-2.57	997.5	-473.3	-2.62
NXACMZ		1,205.0	-191.5	-1.25	1,379.0	-91.8	-0.51
PEBLVY		1,403.0	6.5	0.04	1,375.5	-95.3	-0.53
PN4RZY		1,650.0	253.5	1.66	1,656.5	185.7	1.03
PTD6GX		1,689.0	292.5	1.92	1,782.0	311.2	1.72
PZRRQ2		1,476.5	80.0	0.52	1,532.3	61.5	0.34
QKD6HV		1,618.0	221.5	1.45	1,770.0	299.2	1.66
QTRUG4		1,372.6	-23.9	-0.16	1,557.6	86.8	0.48
RJGP6X		1,406.0	9.5	0.06	1,472.0	1.1	0.01
RNDGDV		1,256.0	-140.5	-0.92	1,386.5	-84.3	-0.47
RYU8TR		1,454.0	57.5	0.38	1,599.1	128.3	0.71
TZZ9TV		1,503.2	106.7	0.70	1,590.0	119.2	0.66
UEWNTF		1,153.1	-243.4	-1.59	1,097.2	-373.6	-2.07
V4UPHV		1,427.5	31.0	0.20	1,492.0	21.2	0.12
V728GQ		1,523.5	127.0	0.83	1,464.5	-6.3	-0.03
VF79ZQ		1,328.0	-68.5	-0.45	1,517.5	46.7	0.26
W7YQ3R		1,465.5	69.0	0.45	1,443.0	-27.8	-0.15
WB6JWN		1,524.5	128.0	0.84	1,576.5	105.7	0.59
WGWT7L		1,508.1	111.6	0.73	1,476.8	6.0	0.03
WKFLHN		1,528.7	132.2	0.87	1,603.4	132.6	0.73
WP8TZX		1,335.5	-61.0	-0.40	1,419.5	-51.3	-0.28
X2JFNN		1,455.5	59.0	0.39	1,507.0	36.2	0.20
X4JXFN		1,537.4	140.9	0.92	1,624.4	153.6	0.85

Summary Statistics	
Grand Means	1,396.47 psi 1,470.80 psi
Std Dev Btwn Labs	152.70 psi 180.50 psi
Statistics based on 61 of 62 reporting participants	

Summary Statistics in SI Units	
Grand Means	9.6282 MPa 10.140 MPa
Std Dev Btwn Labs	1.0528 MPa 1.240 MPa
Statistics based on 61 of 62 reporting participants	



Rubber Interlaboratory Testing Program
Analysis 607
Stress at 300% Elongation (psi)

Report #227
1st Qtr 2026

Samples A61-A62: Polyisoprene Compound & A63-A64: Polyisoprene Compound

Comments on Assigned Data Flags for Test #607

3QWGEK (X) - Inconsistent in testing between samples.



Rubber Interlaboratory Testing Program

Report #227

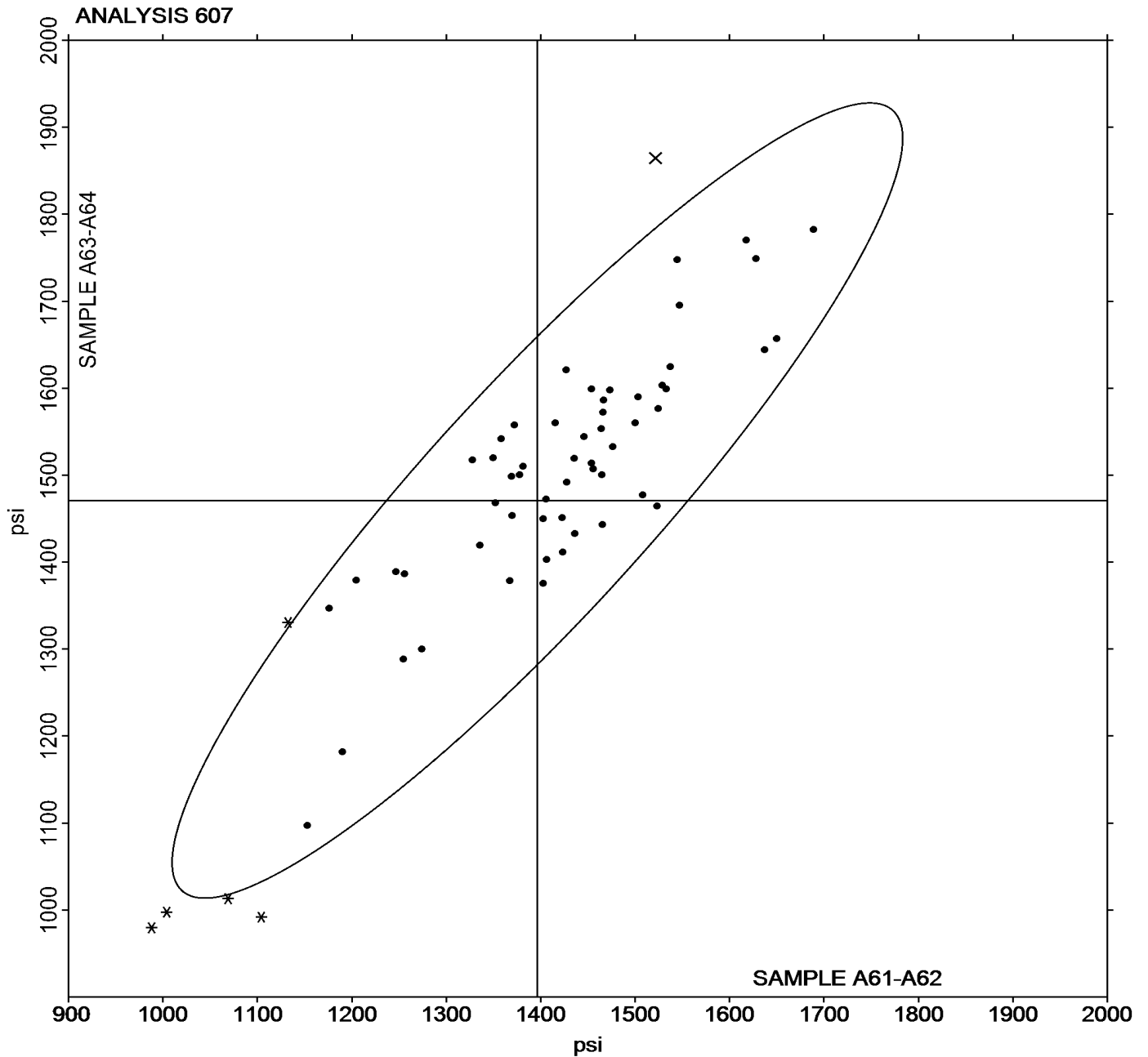
Analysis 607

1st Qtr 2026

Stress at 300% Elongation (psi)

Grand Mean Sample **A61-A62** = 1,396.47 psi

Grand Mean Sample **A63-A64** = 1,470.80 psi





Rubber Interlaboratory Testing Program

Report #227

Analysis 608

1st Qtr 2026

Stress at 100% Elongation (psi)

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2M3ZPK		274.5	-28.8	-0.80	313.0	-2.2	-0.06
2U47PG		320.5	17.2	0.48	318.5	3.3	0.09
2WD3BL	*	224.5	-78.8	-2.18	215.0	-100.2	-2.65
3GVMQM		292.3	-11.1	-0.31	300.2	-15.0	-0.40
3M2MGJ		288.1	-15.2	-0.42	310.9	-4.3	-0.11
3QWGEK		309.0	5.7	0.16	344.0	28.8	0.76
43CGVD		291.5	-11.8	-0.33	320.5	5.3	0.14
4MG72F		275.6	-27.8	-0.77	295.2	-20.1	-0.53
4Q2YDH		322.0	18.7	0.52	334.0	18.8	0.50
4QVWBG		305.0	1.7	0.05	330.0	14.8	0.39
6LJ9BK		267.5	-35.8	-0.99	265.0	-50.2	-1.33
7HYGYH		321.3	17.9	0.50	328.5	13.3	0.35
7URZFA		279.0	-24.3	-0.67	278.5	-36.7	-0.97
8HUQYD	*	207.0	-96.3	-2.67	208.0	-107.2	-2.83
8LWK4A		291.5	-11.8	-0.33	315.0	-0.2	-0.01
97C7FG		331.5	28.2	0.78	325.0	9.8	0.26
9JKB6A		320.0	16.7	0.46	341.5	26.3	0.69
9TRQCH		306.0	2.7	0.07	309.7	-5.5	-0.15
9YT38E		372.7	69.3	1.92	366.4	51.2	1.35
A6XENC		310.5	7.2	0.20	328.0	12.8	0.34
AL79H7		335.0	31.7	0.88	337.9	22.7	0.60
BN64EE		328.5	25.2	0.70	350.3	35.1	0.93
BV9XNA	*	394.5	91.2	2.52	393.5	78.3	2.07
BZH4B9		263.2	-40.1	-1.11	299.1	-16.1	-0.43
DALZ8A		270.0	-33.3	-0.92	269.5	-45.7	-1.21
DRYK4D		308.5	5.2	0.14	300.0	-15.2	-0.40
DWRNN6		275.5	-27.8	-0.77	299.5	-15.7	-0.41
EEQ3MB		288.5	-14.8	-0.41	287.4	-27.8	-0.73
EJ34RE		339.0	35.7	0.99	355.0	39.8	1.05
FAR27E		280.7	-22.7	-0.63	274.1	-41.1	-1.08
GFRZU9		311.0	7.7	0.21	319.5	4.3	0.11
GT2G3Y	*	392.5	89.2	2.47	421.5	106.3	2.81
HA78HA		256.0	-47.3	-1.31	282.5	-32.7	-0.86
HCCPG6		297.5	-5.8	-0.16	290.5	-24.7	-0.65
JC4778		282.0	-21.3	-0.59	328.5	13.3	0.35
JC8VB4		291.5	-11.8	-0.33	313.3	-1.9	-0.05
L7E8T4		290.8	-12.5	-0.35	323.4	8.2	0.22
LEM2MW		286.5	-16.9	-0.47	306.8	-8.4	-0.22



Rubber Interlaboratory Testing Program
Analysis 608
Stress at 100% Elongation (psi)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
M37LAV		315.5	12.1	0.34	353.9	38.7	1.02
MA8QAR		317.5	14.2	0.39	329.5	14.3	0.38
NTB6XW	*	209.5	-93.8	-2.60	208.0	-107.2	-2.83
NXACMZ		271.5	-31.8	-0.88	313.5	-1.7	-0.05
PEBLVY		307.5	4.2	0.12	295.5	-19.7	-0.52
PN4RZY		354.0	50.7	1.40	340.0	24.8	0.65
PTD6GX		367.5	64.2	1.78	372.0	56.8	1.50
PZRRQ2		322.0	18.7	0.52	324.9	9.7	0.26
QKD6HV		341.0	37.7	1.04	369.0	53.8	1.42
QTRUG4		266.8	-36.5	-1.01	305.1	-10.1	-0.27
RJGP6X		299.4	-4.0	-0.11	309.6	-5.6	-0.15
RNDGDV		274.5	-28.8	-0.80	308.0	-7.2	-0.19
RVUCUP		319.0	15.7	0.43	345.5	30.3	0.80
RYU8TR		307.5	4.2	0.11	332.9	17.7	0.47
TZZ9TV		322.3	19.0	0.53	336.4	21.2	0.56
UEWNTP		248.0	-55.3	-1.53	233.5	-81.7	-2.16
V4UPHV		299.0	-4.3	-0.12	304.0	-11.2	-0.30
V728GQ	*	336.0	32.7	0.90	298.5	-16.7	-0.44
VF79ZQ		294.5	-8.8	-0.24	332.5	17.3	0.46
W7YQ3R		327.0	23.7	0.66	321.0	5.8	0.15
WB6JWN		316.5	13.2	0.36	319.0	3.8	0.10
WGWT7L		327.5	24.2	0.67	309.5	-5.7	-0.15
WKFLHN		331.4	28.1	0.78	337.2	22.0	0.58
WP8TZX		288.5	-14.8	-0.41	306.0	-9.2	-0.24
X2JFNN		321.0	17.7	0.49	337.0	21.8	0.58
X4JXFN		327.1	23.7	0.66	332.1	16.9	0.45

Grand Means		Summary Statistics	
	303.33 psi		315.21 psi
Std Dev Btwn Labs	36.12 psi		37.88 psi
Statistics based on 64 of 64 reporting participants			



Rubber Interlaboratory Testing Program
Analysis 608
Stress at 100% Elongation (psi)

Report #227
1st Qtr 2026

		Summary Statistics in SI Units	
Grand Means	2.0914 MPa	2.1700 MPa	
Std Dev Btwn Labs	0.2491 MPa	0.2600 MPa	
Statistics based on 64 of 64 reporting participants			

Samples A61-A62: Polyisoprene Compound & A63-A64: Polyisoprene Compound



Rubber Interlaboratory Testing Program

Report #227

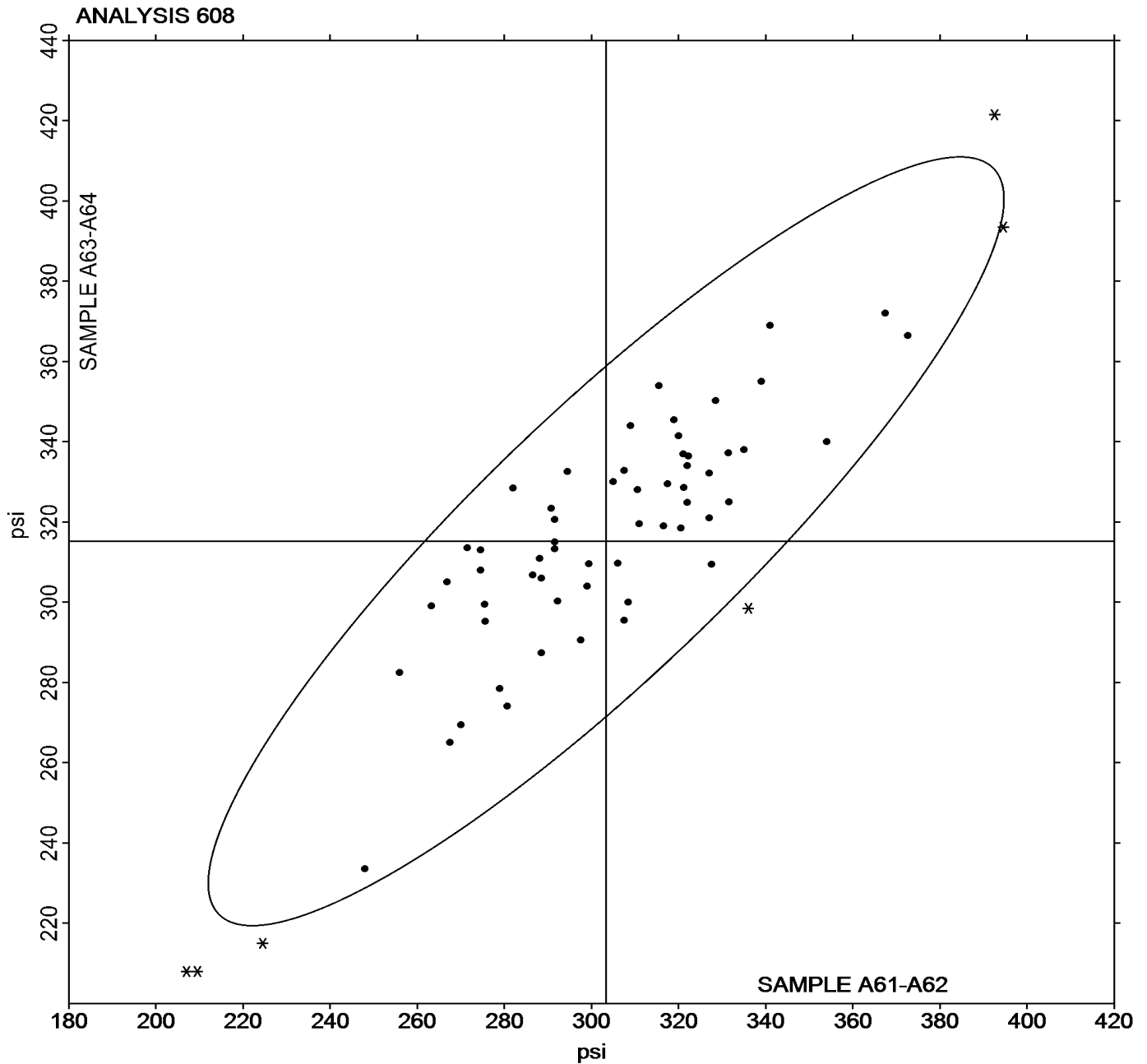
Analysis 608

1st Qtr 2026

Stress at 100% Elongation (psi)

Grand Mean Sample **A61-A62** = 303.33 psi

Grand Mean Sample **A63-A64** = 315.21 psi





Rubber Interlaboratory Testing Program
Analysis 620
Hardness (Shore A/Type A)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2M3ZPK	X	31.05	-25.59	-16.60	30.10	-27.12	-18.41	BT
2U47PG		55.40	-1.24	-0.80	55.80	-1.42	-0.97	BT
2VHJ9K	*	52.50	-4.14	-2.68	53.50	-3.72	-2.53	BT
2WD3BL	*	60.00	3.36	2.18	61.00	3.78	2.56	BT
3GVMQM		56.50	-0.14	-0.09	58.00	0.78	0.53	HH
3M2MGJ		53.65	-2.99	-1.94	55.30	-1.92	-1.31	BT
3QWGEK	X	53.00	-3.64	-2.36	51.50	-5.72	-3.88	BT
43CGVD		57.70	1.06	0.69	57.85	0.63	0.42	BT
4MG72F		54.20	-2.44	-1.58	56.05	-1.17	-0.80	BT
4Q2YDH		55.90	-0.74	-0.48	55.95	-1.27	-0.86	BT
66XK3B		53.30	-3.34	-2.17	54.50	-2.72	-1.85	BT
6LJ9BK		56.00	-0.64	-0.41	56.50	-0.72	-0.49	BT
7HYGYH		57.45	0.81	0.53	58.25	1.03	0.70	BT
7URZFA		57.75	1.11	0.72	58.70	1.48	1.00	HH
8HUQYD	X	49.00	-7.64	-4.95	49.00	-8.22	-5.58	HH
8LWK4A		54.50	-2.14	-1.39	56.00	-1.22	-0.83	BT
97C7FG		57.50	0.86	0.56	57.50	0.28	0.19	BT
9JKB6A		56.00	-0.64	-0.41	57.00	-0.22	-0.15	BT
9TRQCH		56.00	-0.64	-0.41	56.00	-1.22	-0.83	BT
9YT38E		54.50	-2.14	-1.39	56.00	-1.22	-0.83	BT
A6XENC		57.25	0.61	0.40	57.10	-0.12	-0.08	BT
AL79H7		56.55	-0.09	-0.06	57.10	-0.12	-0.08	BT
BN64EE		58.35	1.71	1.11	59.80	2.58	1.75	XX
BV9XNA		58.00	1.36	0.88	57.50	0.28	0.19	BT
BZH4B9		56.85	0.21	0.14	57.20	-0.02	-0.02	BT
DALZ8A		56.90	0.26	0.17	56.90	-0.32	-0.22	BT
DRYK4D		56.50	-0.14	-0.09	57.00	-0.22	-0.15	HH
DWRNN6		56.00	-0.64	-0.41	56.00	-1.22	-0.83	BT
E67PU7		59.00	2.36	1.53	59.00	1.78	1.21	HH
EEQ3MB		55.50	-1.14	-0.74	57.00	-0.22	-0.15	BT
EJ34RE		55.50	-1.14	-0.74	55.50	-1.72	-1.17	HH
FAR27E		59.05	2.41	1.56	59.10	1.88	1.27	BT
GFRZU9		57.55	0.91	0.59	57.40	0.18	0.12	XX
GT2G3Y	X	62.65	6.01	3.90	63.90	6.68	4.53	BT
H3HRJ4		57.00	0.36	0.23	57.20	-0.02	-0.02	BT
HA78HA		57.50	0.86	0.56	57.50	0.28	0.19	BT
HCCPG6		59.00	2.36	1.53	59.00	1.78	1.21	BT
JC4778	*	59.50	2.86	1.86	61.00	3.78	2.56	BT



Rubber Interlaboratory Testing Program
Analysis 620
Hardness (Shore A/Type A)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
JC8VB4		54.95	-1.69	-1.10	55.40	-1.82	-1.24	BT
L7E8T4		56.40	-0.24	-0.16	58.05	0.83	0.56	BT
LEM2MW		54.20	-2.44	-1.58	55.90	-1.32	-0.90	BT
M37LAV		58.00	1.36	0.88	58.50	1.28	0.87	HH
M86TYZ		56.50	-0.14	-0.09	57.50	0.28	0.19	BT
MA8QAR		56.50	-0.14	-0.09	57.00	-0.22	-0.15	BT
MWJRG6		57.00	0.36	0.23	57.50	0.28	0.19	BT
NTB6XW	X	50.50	-6.14	-3.98	50.00	-7.22	-4.90	HH
NXACMZ		59.00	2.36	1.53	59.00	1.78	1.21	HH
PEBLVY		57.50	0.86	0.56	57.25	0.03	0.02	HH
PN4RZY		57.40	0.76	0.49	57.15	-0.07	-0.05	BT
PTD6GX		59.00	2.36	1.53	59.55	2.33	1.58	HH
PZRRQ2		59.25	2.61	1.69	58.85	1.63	1.10	BT
QKD6HV		57.90	1.26	0.82	57.55	0.33	0.22	BT
QTRUG4		56.00	-0.64	-0.41	57.00	-0.22	-0.15	HH
QYEGDU		56.30	-0.34	-0.22	57.60	0.38	0.26	BT
RJGP6X		56.50	-0.14	-0.09	58.00	0.78	0.53	BT
RNDGDV		56.00	-0.64	-0.41	56.00	-1.22	-0.83	BT
RVUCUP		57.15	0.51	0.33	57.00	-0.22	-0.15	BT
RYU8TR		56.95	0.31	0.20	58.05	0.83	0.56	BT
TZZ9TV		58.40	1.76	1.14	60.10	2.88	1.95	BT
UEWNTF		54.50	-2.14	-1.39	54.50	-2.72	-1.85	BT
V4UPHV		55.50	-1.14	-0.74	55.00	-2.22	-1.51	BT
V728GQ		56.50	-0.14	-0.09	56.00	-1.22	-0.83	BT
VF79ZQ		56.00	-0.64	-0.41	57.00	-0.22	-0.15	BT
W7YQ3R		56.17	-0.47	-0.31	56.69	-0.53	-0.36	BT
WB6JWN		55.50	-1.14	-0.74	57.50	0.28	0.19	BT
WGWT7L		56.40	-0.24	-0.16	56.40	-0.82	-0.56	BT
WKFLHN		54.95	-1.69	-1.10	55.25	-1.97	-1.34	BT
WP8TZX		56.10	-0.54	-0.35	56.70	-0.52	-0.36	BT
X2JFNN		56.50	-0.14	-0.09	58.00	0.78	0.53	BT
X4JXFN		57.85	1.21	0.78	58.60	1.38	0.93	BT
Z4ZL2G		56.50	-0.14	-0.09	57.00	-0.22	-0.15	BT



Rubber Interlaboratory Testing Program
Analysis 621
Density

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2M3ZPK	*	1.126	-0.007	-2.47	1.129	-0.005	-1.92
2U47PG	*	1.135	0.002	0.66	1.133	-0.001	-0.32
2WD3BL		1.133	-0.001	-0.21	1.134	0.000	-0.12
3GVMQM		1.131	-0.002	-0.73	1.133	-0.001	-0.52
3M2MGJ		1.132	-0.001	-0.38	1.133	-0.001	-0.32
3QWGEK	X	1.128	-0.005	-1.77	1.119	-0.015	-6.14
43CGVD		1.133	-0.001	-0.21	1.134	0.000	-0.12
4Q2YDH		1.132	-0.001	-0.50	1.132	-0.002	-0.68
4QVWBG		1.131	-0.003	-0.90	1.132	-0.002	-0.92
6LJ9BK		1.135	0.002	0.66	1.135	0.001	0.49
7HYGYH		1.131	-0.003	-0.90	1.132	-0.002	-0.92
7URZFA		1.131	-0.003	-0.90	1.132	-0.002	-0.62
8HUQYD		1.131	-0.002	-0.73	1.132	-0.002	-0.92
8LWK4A		1.135	0.002	0.66	1.137	0.003	1.09
9TRQCH		1.132	-0.002	-0.55	1.133	-0.001	-0.32
9YT38E		1.134	0.001	0.32	1.134	0.000	0.04
A6XENC		1.135	0.002	0.54	1.135	0.001	0.47
AL79H7		1.138	0.004	1.55	1.139	0.005	2.13
BN64EE		1.130	-0.003	-1.06	1.131	-0.003	-1.20
BV9XNA		1.132	-0.002	-0.55	1.133	-0.001	-0.52
BZH4B9		1.131	-0.002	-0.80	1.133	-0.001	-0.32
DALZ8A	X	8.665	7.532	2,622.39	8.470	7.336	2,946.21
DRYK4D		1.134	0.000	0.14	1.134	0.000	0.08
DWRNN6	X	1.131	-0.002	-0.61	1.129	-0.005	-2.11
E67PU7		1.132	-0.001	-0.47	1.133	-0.001	-0.52
EEQ3MB		1.135	0.002	0.70	1.136	0.002	0.83
EJ34RE		1.138	0.005	1.66	1.137	0.004	1.47
FAR27E		1.132	-0.001	-0.38	1.133	-0.001	-0.52
GFRZU9		1.140	0.007	2.40	1.139	0.005	2.09
H3HRJ4		1.130	-0.004	-1.25	1.132	-0.002	-0.72
HA78HA		1.135	0.002	0.66	1.136	0.002	0.89
HCCPG6		1.132	-0.001	-0.40	1.132	-0.001	-0.58
JC4778		1.133	0.000	-0.03	1.134	0.000	-0.12
M37LAV		1.133	0.000	-0.03	1.133	-0.001	-0.32
M86TYZ		1.133	0.000	-0.05	1.133	-0.001	-0.50
MA8QAR	*	1.126	-0.007	-2.47	1.127	-0.007	-2.73
NTB6XW		1.132	-0.002	-0.55	1.133	-0.001	-0.52
NXACMZ		1.133	0.000	-0.03	1.134	0.000	-0.12



Rubber Interlaboratory Testing Program
Analysis 621
Density

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample A61-A62			Sample A63-A64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PEBLVY		1.133	0.000	-0.03	1.133	-0.001	-0.32
PN4RZY		1.136	0.003	0.87	1.137	0.003	1.17
PTD6GX		1.136	0.002	0.86	1.136	0.002	0.77
PZRRQ2		1.136	0.003	1.05	1.137	0.003	1.23
QKD6HV		1.134	0.000	0.14	1.133	-0.001	-0.32
RJGP6X		1.133	-0.001	-0.21	1.134	0.000	0.08
RVUCUP		1.137	0.003	1.19	1.137	0.003	1.09
RYU8TR		1.135	0.002	0.70	1.134	0.001	0.20
UEWNTP	X	1.134	0.001	0.32	1.138	0.004	1.69
V728GQ		1.133	0.000	0.02	1.134	0.000	0.00
VF79ZQ		1.135	0.002	0.77	1.135	0.001	0.55
WB6JWN		1.136	0.003	1.17	1.138	0.004	1.69
WGWT7L		1.136	0.003	1.01	1.135	0.001	0.49
WP8TZX	*	1.137	0.003	1.19	1.139	0.005	1.89
X2JFNN		1.127	-0.006	-2.12	1.130	-0.004	-1.72

Summary Statistics			
Grand Means	1.1331	g/cm ³	(Mg/m ³)
	1.1338	g/cm ³	(Mg/m ³)
Stnd Dev Btwn Labs	0.0029	g/cm ³	(Mg/m ³)
	0.0025	g/cm ³	(Mg/m ³)
Statistics based on 49 of 53 reporting participants			

Samples A61-A62: Polyisoprene Compound & A63-A64: Polyisoprene Compound

Comments on Assigned Data Flags for Test #621

- 3QWGEK (X) - Data for sample group A63-A64 are low. Inconsistent within the determinations of both sample groups.
- DALZ8A (X) - Extreme Data.
- DWRNN6 (X) - Inconsistent in testing between samples.
- UEWNTP (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group A61-A62.



Rubber Interlaboratory Testing Program

Report #227

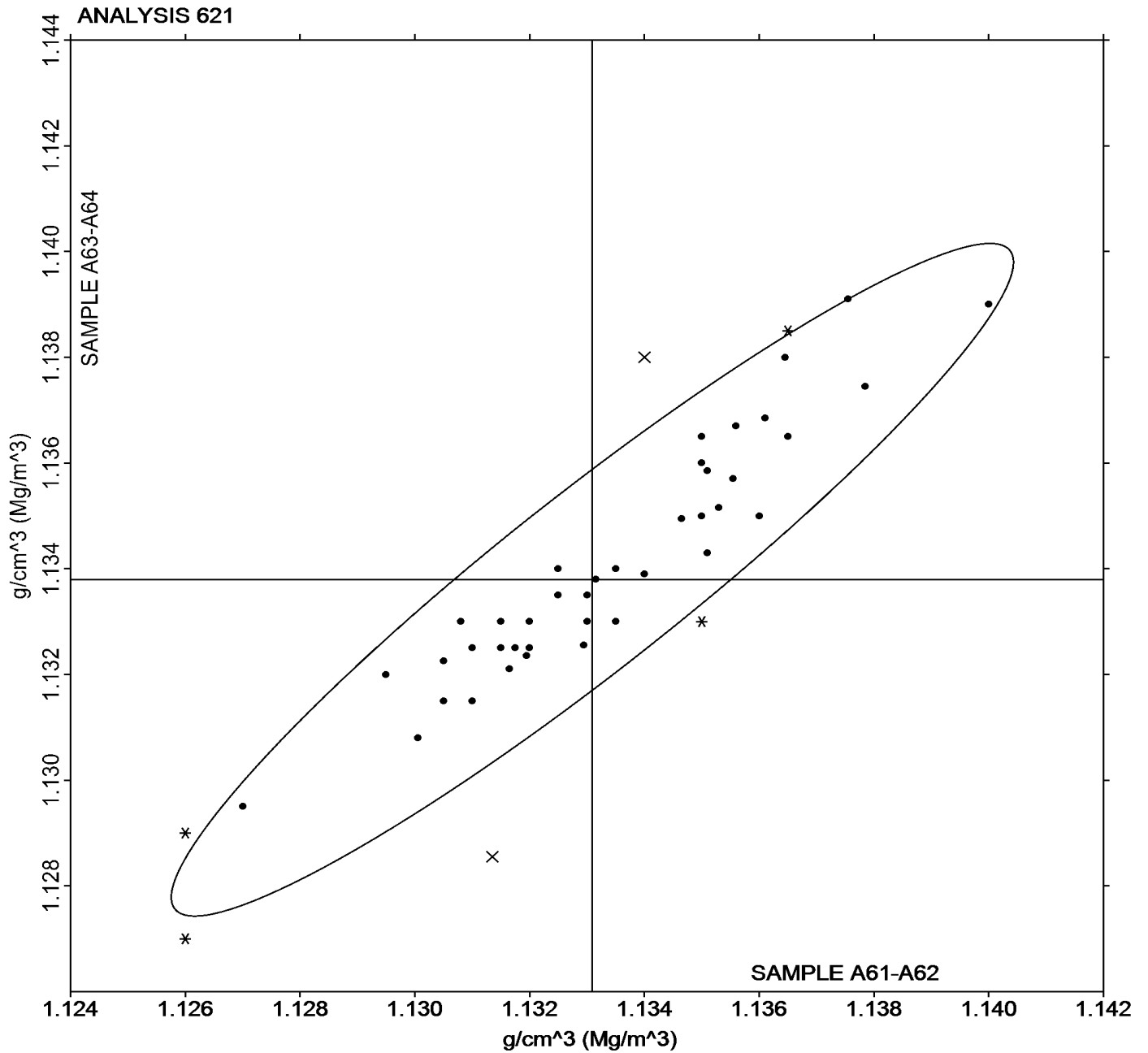
Analysis 621

1st Qtr 2026

Density

Grand Mean Sample **A61-A62** = 1.1331 g/cm³
(Mg/m³)

Grand Mean Sample **A63-A64** = 1.1338 g/cm³
(Mg/m³)





Rubber Interlaboratory Testing Program
Analysis 625
Hardness (Shore D/Type D)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample HA61-HA62			Sample HA63-HA64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2M3ZPK		51.35	-3.46	-1.00	65.40	-1.96	-0.73	BT
2U47PG		51.85	-2.96	-0.86	66.15	-1.21	-0.45	BT
2WD3BL		61.50	6.69	1.93	72.50	5.14	1.92	BT
38RR9H		55.15	0.34	0.10	68.20	0.84	0.31	HH
3QWGEK		59.00	4.19	1.21	71.00	3.64	1.36	HH
43CGVD		54.50	-0.31	-0.09	67.60	0.24	0.09	BT
4MG72F		49.25	-5.56	-1.61	63.25	-4.11	-1.54	BT
64332A		53.20	-1.61	-0.47	66.70	-0.66	-0.25	BT
66XK3B	X	46.15	-8.66	-2.51	51.95	-15.41	-5.76	BT
69HDED		60.50	5.69	1.64	73.00	5.64	2.11	HH
6UCGVC		50.50	-4.31	-1.25	62.00	-5.36	-2.00	BT
97C7FG	*	55.00	0.19	0.05	64.00	-3.36	-1.26	XX
9PPZTA		56.00	1.19	0.34	67.00	-0.36	-0.14	HH
A6XENC		52.50	-2.31	-0.67	66.75	-0.61	-0.23	BT
BD3PA9		53.75	-1.06	-0.31	67.50	0.14	0.05	BT
D72674		51.50	-3.31	-0.96	65.50	-1.86	-0.70	HH
DALZ8A	X	99.00	44.19	12.78	100.00	32.64	12.20	HH
DWRNN6		58.40	3.59	1.04	69.45	2.09	0.78	BT
EQKAQ8		56.00	1.19	0.34	67.40	0.04	0.01	BT
EXMLM4		58.25	3.44	0.99	69.20	1.84	0.69	HH
FW7PU4		56.25	1.44	0.42	68.90	1.54	0.57	HH
JC4778		56.50	1.69	0.49	68.00	0.64	0.24	BT
M37LAV		57.85	3.04	0.88	68.40	1.04	0.39	BT
MWJRG6		53.00	-1.81	-0.52	66.50	-0.86	-0.32	BT
PX9YEY		57.85	3.04	0.88	68.45	1.09	0.41	BT
QLM24Y		60.00	5.19	1.50	70.00	2.64	0.99	BT
QYEGDU		57.65	2.84	0.82	68.80	1.44	0.54	HH
RMY7ZN		48.80	-6.01	-1.74	64.30	-3.06	-1.14	BT
RREGDR		52.45	-2.36	-0.68	66.55	-0.81	-0.30	BT
RYU8TR		56.50	1.69	0.49	69.60	2.24	0.84	BT
ULXVHQ		53.00	-1.81	-0.52	67.00	-0.36	-0.14	BT
V66K9T		56.50	1.69	0.49	70.00	2.64	0.99	HH
X2F3WL		48.00	-6.81	-1.97	61.00	-6.36	-2.38	BT
X4JXFN		54.85	0.04	0.01	67.70	0.34	0.13	BT
YCE8AK		51.45	-3.36	-0.97	65.15	-2.21	-0.83	BT

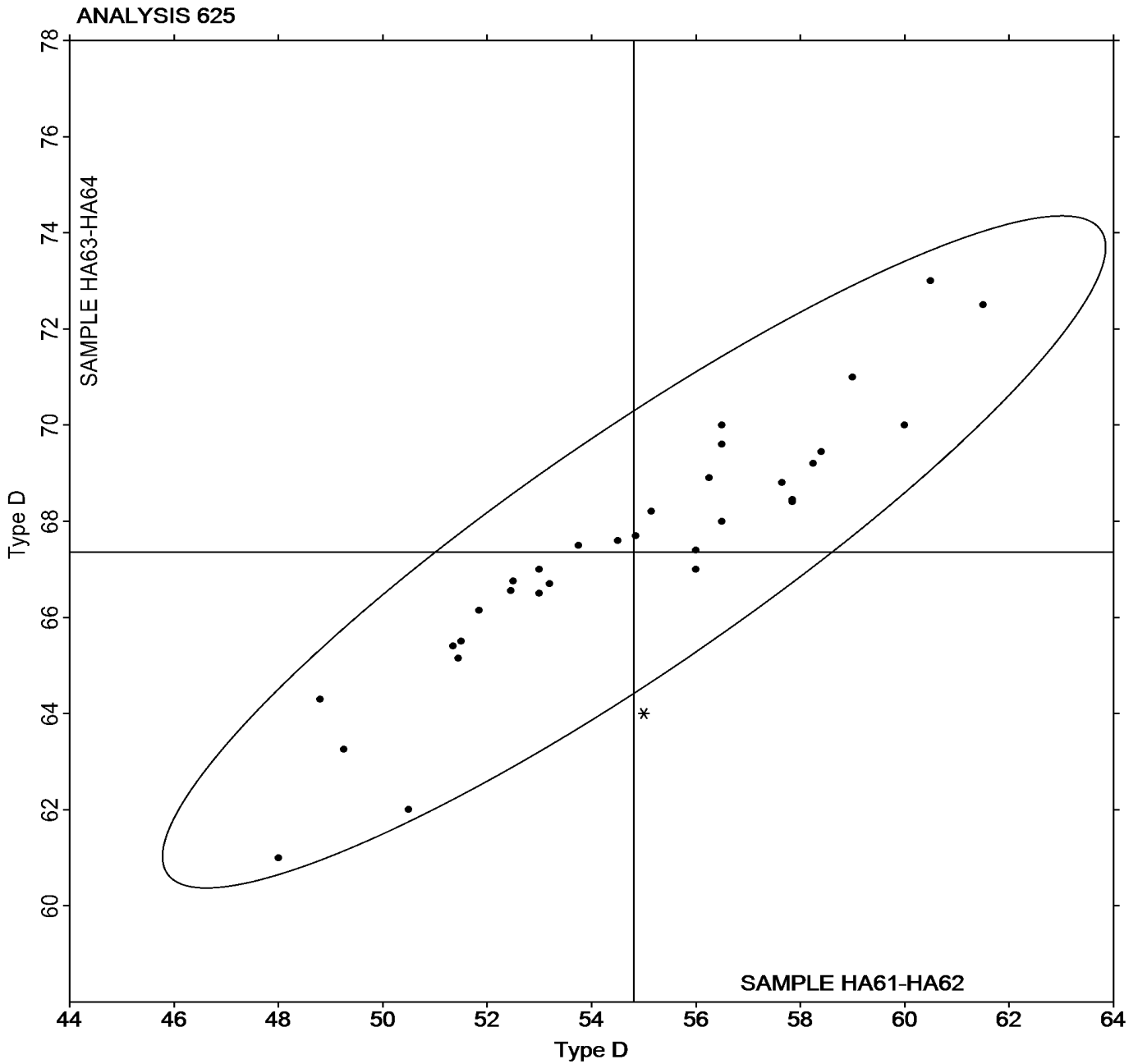


Rubber Interlaboratory Testing Program
Analysis 625
Hardness (Shore D/Type D)

Report #227
1st Qtr 2026

Grand Mean Sample HA61-HA62 = 54.814 Type D

Grand Mean Sample HA63-HA64 = 67.362 Type D





Rubber Interlaboratory Testing Program

Report #227

Analysis 630

1st Qtr 2026

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

WebCode	Data Flag	Sample A61-A62			Sample J61-J62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3GVMQM		3,343.1	107.8	0.45	3,060.3	64.9	0.21
3QWGEK		3,307.0	71.7	0.30	3,195.8	200.3	0.64
43CGVD		2,900.8	-334.5	-1.39	2,995.1	-0.4	0.00
448ZWF	M	No data reported for this sample			2,779.5	-215.9	-0.69
7URZFA		3,292.5	57.2	0.24	2,566.0	-429.4	-1.38
BZH4B9		3,231.0	-4.4	-0.02	3,007.6	12.1	0.04
DALZ8A		2,935.5	-299.8	-1.25	2,930.0	-65.4	-0.21
DRYK4D		3,420.0	184.7	0.77	3,035.0	39.6	0.13
DWRNN6		3,251.5	16.2	0.07	3,109.5	114.1	0.37
MA8QAR		3,325.0	89.7	0.37	3,383.5	388.1	1.24
PN4RZY		3,862.0	626.7	2.61	3,645.5	650.1	2.08
RJGP6X		3,347.0	111.7	0.47	2,571.0	-424.5	-1.36
RYU8TR		2,875.4	-359.9	-1.50	2,723.8	-271.6	-0.87
TZZ9TV		3,071.7	-163.6	-0.68	3,002.2	6.8	0.02
UEWNTP		3,230.7	-4.6	-0.02	2,413.4	-582.0	-1.87
V4UPHV		3,316.5	81.2	0.34	3,178.0	182.6	0.59
WP8TZX		3,055.5	-179.8	-0.75	3,110.0	114.6	0.37

Grand Means		Summary Statistics	
	3,235.32 psi		2,995.41 psi
Stnd Dev Btwn Labs	240.10 psi		311.99 psi
Statistics based on 16 of 17 reporting participants			

Grand Means		Summary Statistics in SI Units	
	22.307 MPa		20.650 MPa
Stnd Dev Btwn Labs	1.655 MPa		2.150 MPa
Statistics based on 16 of 17 reporting participants			

Samples A61-A62: Polyisoprene Compound & J61-J62: Polyisoprene Compound

Comments on Assigned Data Flags for Test #630

448ZWF (M) - Participant did not submit data for sample group A61-A62.

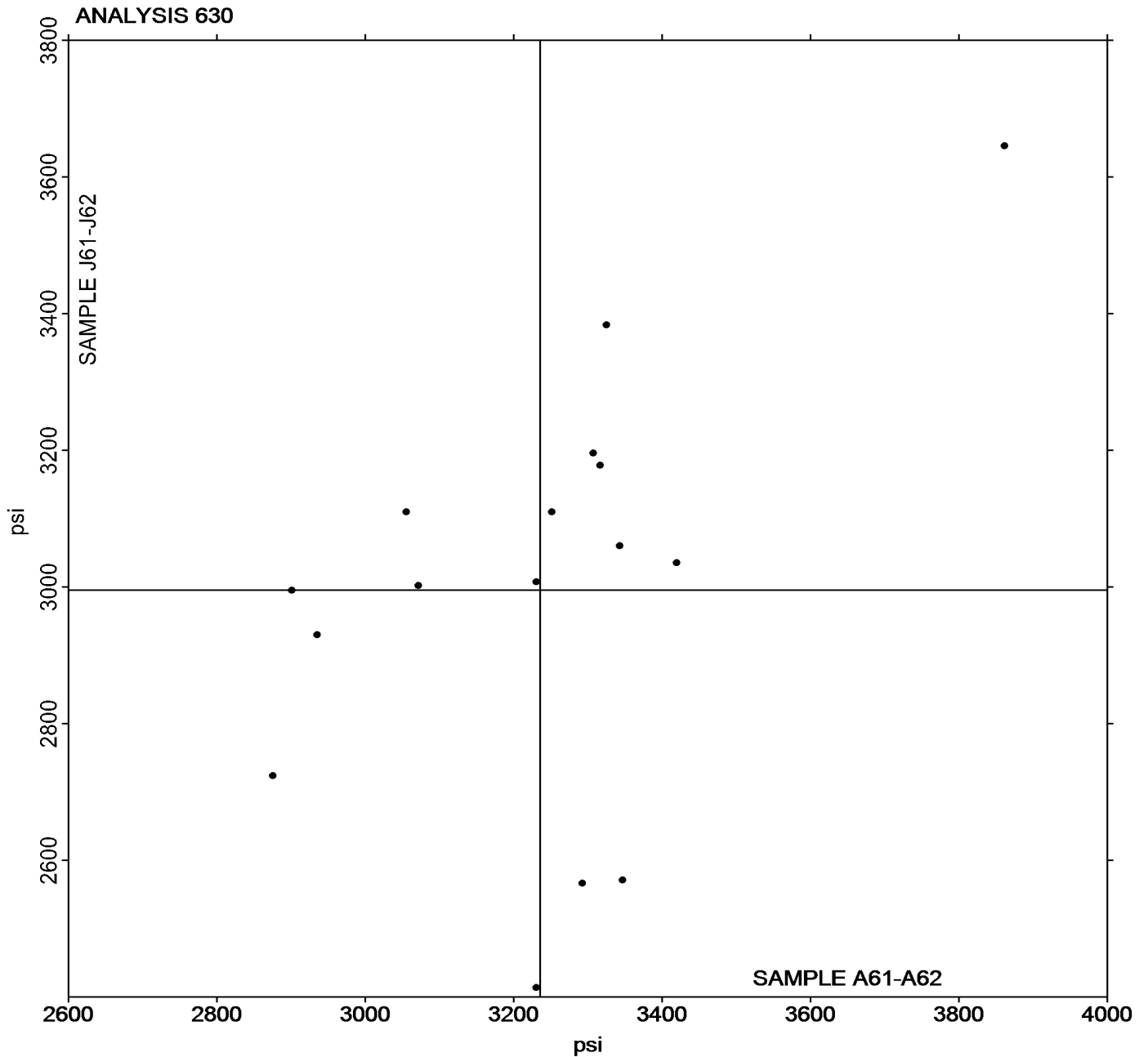


Rubber Interlaboratory Testing Program
Analysis 630
Tensile Strength: Precured vs. Lab-Cured Samples (psi)

Report #227
1st Qtr 2026

Grand Mean Sample **A61-A62** = 3,235.32 psi

Grand Mean Sample **J61-J62** = 2,995.41 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 631

1st Qtr 2026

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

WebCode	Data Flag	Sample A61-A62			Sample J61-J62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3GVMQM		573.5	15.2	0.40	572.0	13.6	0.29
3QWGEK	*	521.0	-37.3	-0.99	453.5	-104.9	-2.22
43CGVD		509.4	-48.9	-1.30	524.4	-34.0	-0.72
448ZWF	M	No data reported for this sample			540.5	-17.9	-0.38
7URZFA		573.0	14.7	0.39	599.5	41.1	0.87
BZH4B9		624.5	66.2	1.75	645.5	87.1	1.84
DALZ8A		545.0	-13.3	-0.35	558.5	0.1	0.00
DRYK4D		574.0	15.7	0.42	570.0	11.6	0.24
DWRNN6		605.4	47.1	1.25	603.0	44.5	0.94
MA8QAR		553.5	-4.8	-0.13	570.5	12.1	0.25
PN4RZY		576.5	18.2	0.48	582.0	23.6	0.50
RJGP6X		559.0	0.6	0.02	551.5	-7.0	-0.15
RYU8TR		485.0	-73.3	-1.94	495.1	-63.3	-1.34
TZZ9TV		528.1	-30.2	-0.80	515.7	-42.8	-0.90
UEWNTP		614.0	55.7	1.48	609.0	50.6	1.07
V4UPHV		543.0	-15.3	-0.41	552.0	-6.4	-0.14
WP8TZX		548.5	-9.8	-0.26	533.0	-25.4	-0.54

Summary Statistics	
Grand Means	558.34 percent
Std Dev Btwn Labs	37.71 percent
	558.45 percent
	47.31 percent
Statistics based on 16 of 17 reporting participants	

Samples A61-A62: Polyisoprene Compound & J61-J62: Polyisoprene Compound

Comments on Assigned Data Flags for Test #631

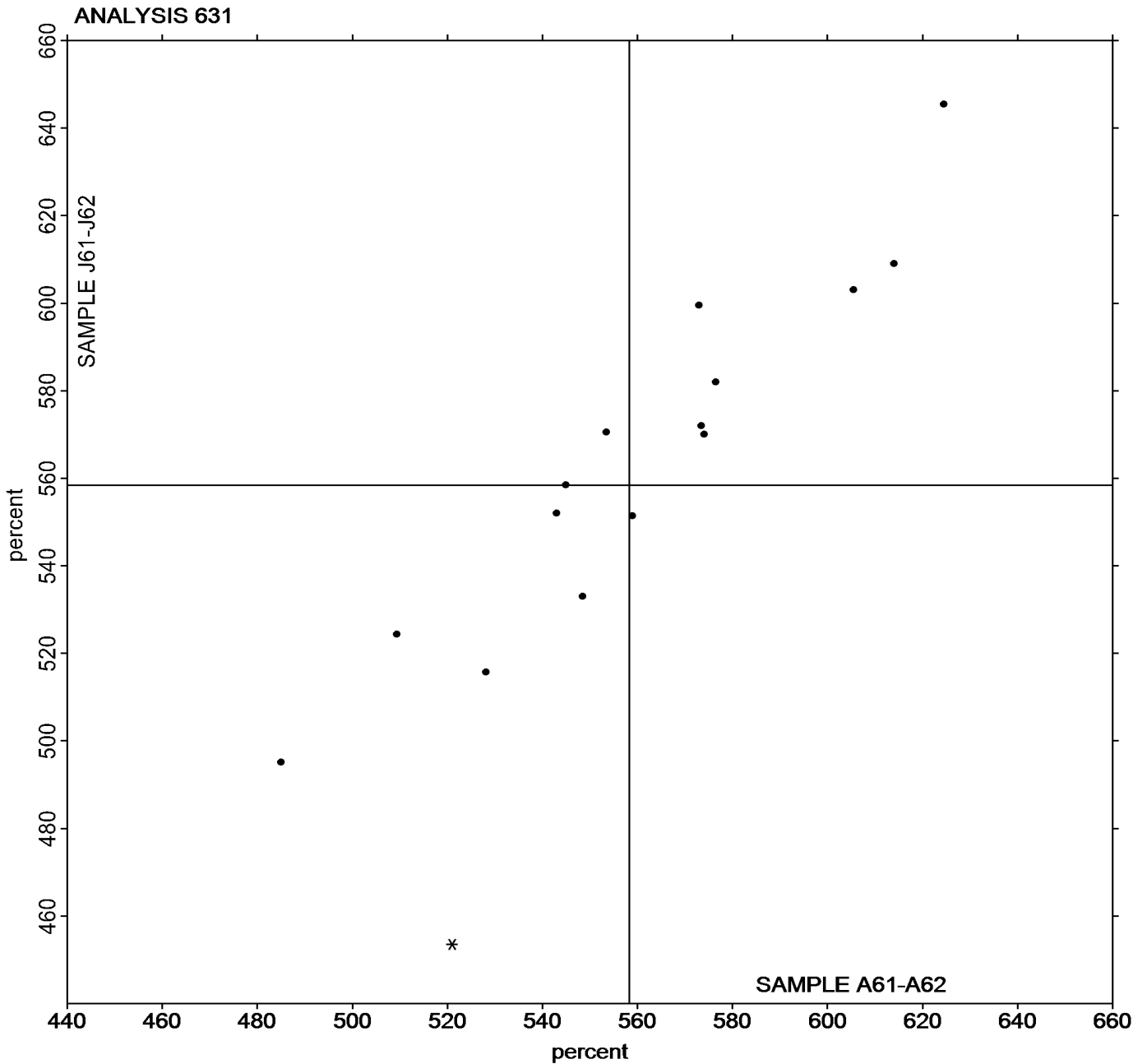
448ZWF (M) - Participant did not submit data for sample group A61-A62.



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

Grand Mean Sample A61-A62 = 558.34 percent

Grand Mean Sample J61-J62 = 558.45 percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 632

1st Qtr 2026

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

WebCode	Data Flag	Sample A61-A62			Sample J61-J62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3GVMQM		1,402.5	25.8	0.19	1,182.1	-47.3	-0.20
3QWGEK		1,521.5	144.8	1.04	1,693.0	463.6	2.01
43CGVD		1,415.6	38.9	0.28	1,324.9	95.6	0.41
448ZWF	M	No data reported for this sample			1,183.0	-46.4	-0.20
7URZFA		1,190.5	-186.2	-1.34	924.5	-304.9	-1.32
BZH4B9		1,176.2	-200.6	-1.44	978.5	-250.9	-1.09
DALZ8A		1,254.5	-122.2	-0.88	1,167.0	-62.4	-0.27
DRYK4D		1,436.5	59.8	0.43	1,219.5	-9.9	-0.04
DWRNN6		1,247.0	-129.7	-0.93	1,097.5	-131.9	-0.57
MA8QAR		1,454.0	77.3	0.55	1,366.5	137.1	0.59
PN4RZY		1,650.0	273.3	1.96	1,398.0	168.6	0.73
RJGP6X		1,406.0	29.3	0.21	1,015.8	-213.6	-0.92
RYU8TR		1,454.0	77.3	0.55	1,303.9	74.5	0.32
TZZ9TV		1,503.2	126.5	0.91	1,451.9	222.5	0.96
UEWNTP		1,153.1	-223.7	-1.61	786.8	-442.5	-1.92
V4UPHV		1,427.5	50.8	0.36	1,318.5	89.1	0.39
WP8TZX		1,335.5	-41.2	-0.30	1,441.5	212.1	0.92

Grand Means		Summary Statistics	
	1,376.72 psi		1,229.37 psi
Stnd Dev Btwn Labs	139.32 psi		230.98 psi
Statistics based on 16 of 17 reporting participants			

Grand Means		Summary Statistics in SI Units	
	9.4921 MPa		8.4800 MPa
Stnd Dev Btwn Labs	0.9606 MPa		1.5900 MPa
Statistics based on 16 of 17 reporting participants			

Samples A61-A62: Polyisoprene Compound & J61-J62: Polyisoprene Compound

Comments on Assigned Data Flags for Test #632

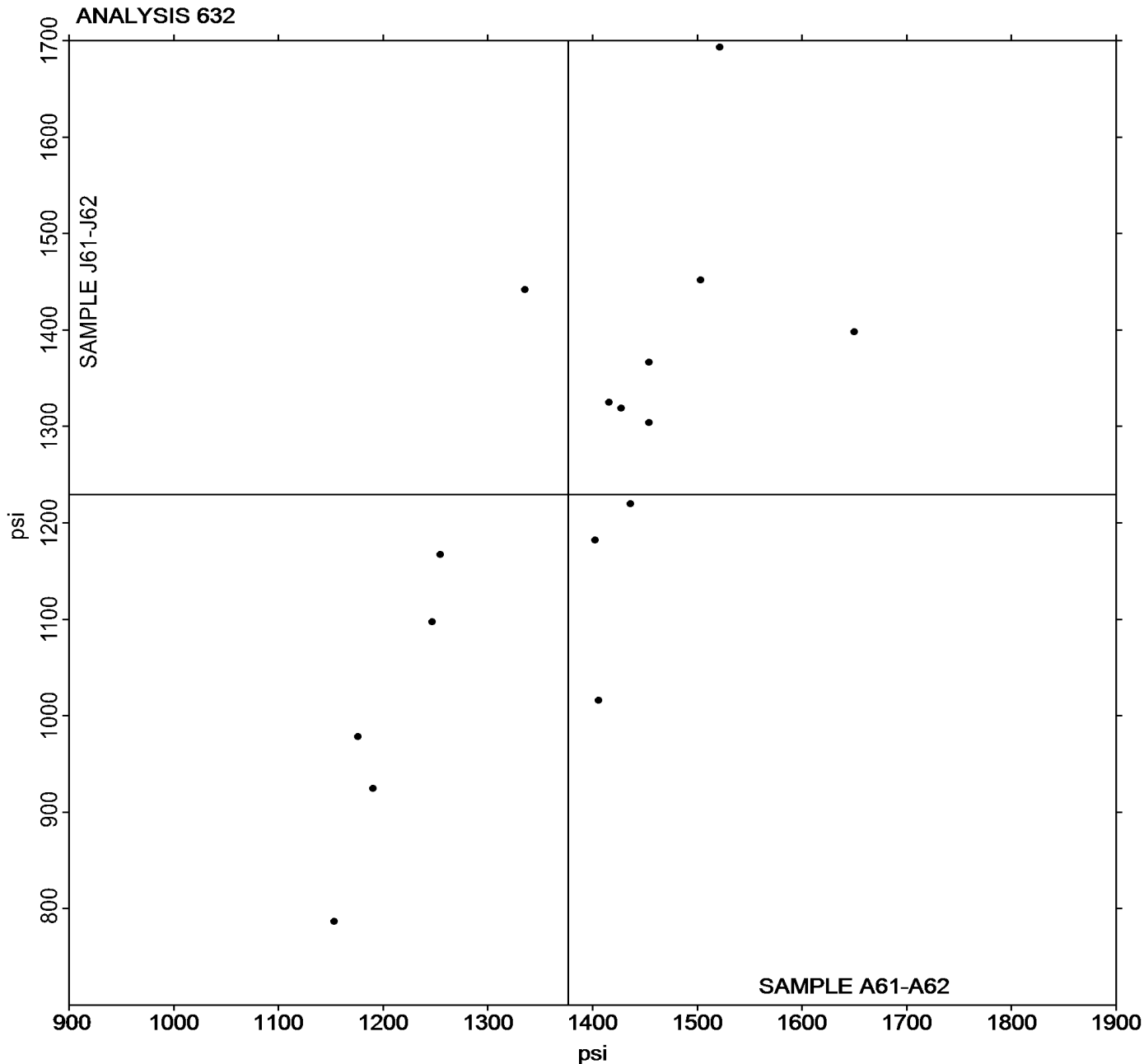
448ZWF (M) - Participant did not submit data for sample group A61-A62.



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

Grand Mean Sample A61-A62 = 1,376.72 psi

Grand Mean Sample J61-J62 = 1,229.37 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 633

1st Qtr 2026

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

WebCode	Data Flag	Sample A61-A62			Sample J61-J62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3GVMQM		292.3	-3.1	-0.12	253.8	-11.6	-0.28
3QWGEK		309.0	13.7	0.53	312.5	47.1	1.14
43CGVD		291.5	-3.8	-0.15	288.6	23.3	0.56
448ZWF	M	No data reported for this sample			255.5	-9.9	-0.24
7URZFA		279.0	-16.3	-0.64	217.0	-48.4	-1.17
BZH4B9		263.2	-32.1	-1.25	230.8	-34.6	-0.84
DALZ8A		270.0	-25.3	-0.99	264.0	-1.4	-0.03
DRYK4D		308.5	13.2	0.51	264.5	-0.9	-0.02
DWRNN6		275.5	-19.8	-0.77	250.0	-15.4	-0.37
MA8QAR		317.5	22.2	0.87	313.5	48.1	1.16
PN4RZY		354.0	58.7	2.29	303.0	37.6	0.91
RJGP6X		299.4	4.0	0.16	219.5	-45.9	-1.11
RYU8TR		307.5	12.2	0.47	274.8	9.5	0.23
TZZ9TV		322.3	27.0	1.05	311.0	45.6	1.10
UEWNTP		248.0	-47.3	-1.85	166.1	-99.3	-2.39
V4UPHV		299.0	3.7	0.14	279.0	13.6	0.33
WP8TZX		288.5	-6.8	-0.27	298.0	32.6	0.79

Grand Means		Summary Statistics	
	295.32 psi		265.38 psi
Stnd Dev Btwn Labs	25.61 psi		41.47 psi
Statistics based on 16 of 17 reporting participants			

Grand Means		Summary Statistics in SI Units	
	2.0361 MPa		1.8300 MPa
Stnd Dev Btwn Labs	0.1766 MPa		0.2900 MPa
Statistics based on 16 of 17 reporting participants			

Samples A61-A62: Polyisoprene Compound & J61-J62: Polyisoprene Compound

Comments on Assigned Data Flags for Test #633

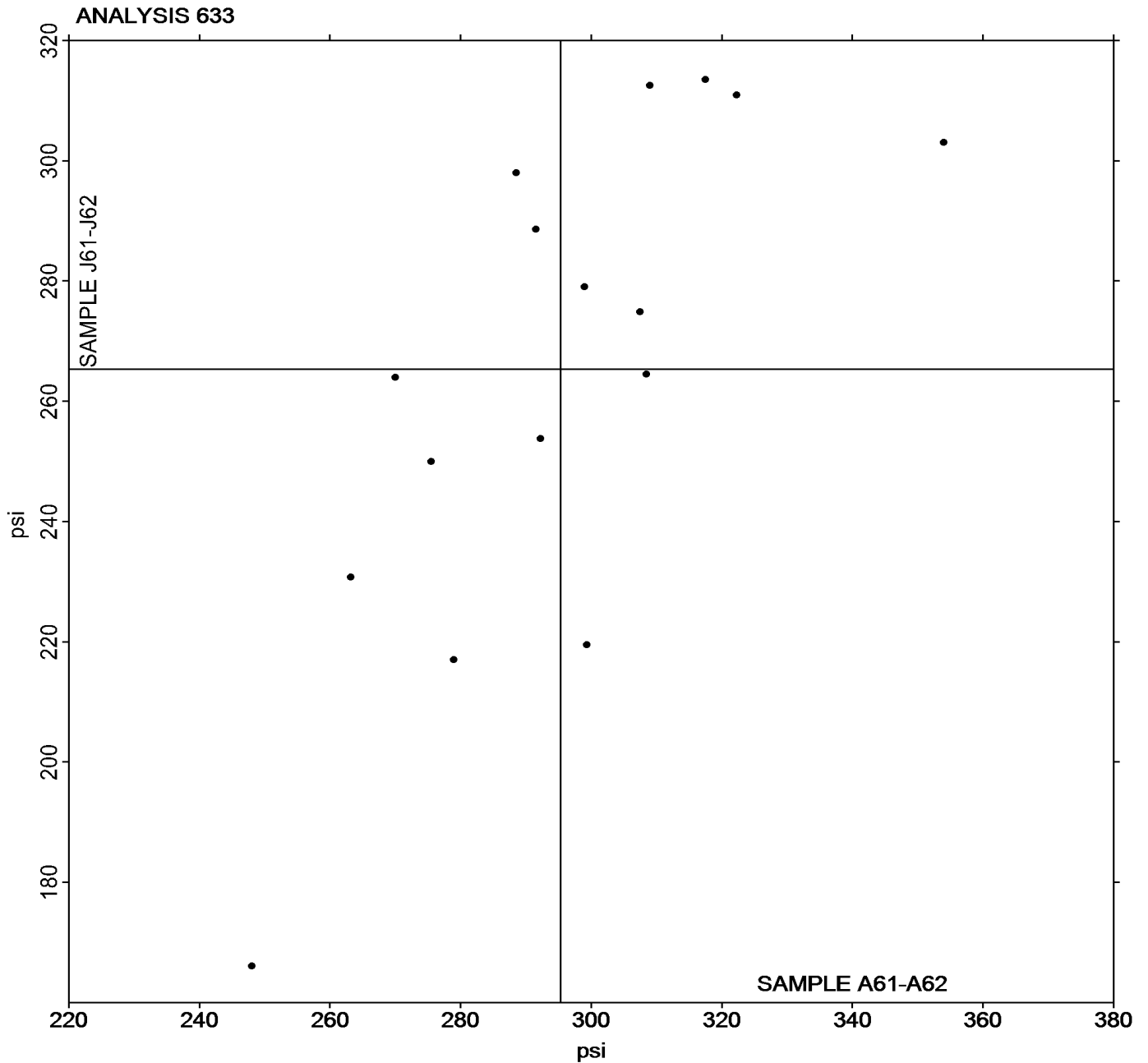
448ZWF (M) - Participant did not submit data for sample group A61-A62.



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

Grand Mean Sample A61-A62 = 295.32 psi

Grand Mean Sample J61-J62 = 265.38 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 635
Compression Set Method B

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample N61			Sample N62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
3GVMQM		17.67	2.18	0.55	16.67	1.35	0.34
3M2MGJ		13.42	-2.07	-0.52	14.70	-0.61	-0.15
3QWGEK		18.94	3.45	0.87	17.53	2.22	0.56
4Q2YDH		8.67	-6.82	-1.73	8.33	-6.98	-1.76
6LJ9BK		14.33	-1.16	-0.29	14.33	-0.98	-0.25
7URZFA		15.69	0.20	0.05	15.81	0.50	0.13
8LWK4A		15.77	0.28	0.07	16.13	0.82	0.21
9YT38E	*	26.33	10.84	2.75	26.00	10.69	2.69
BN64EE		14.67	-0.82	-0.21	15.00	-0.31	-0.08
BZH4B9	*	15.50	0.01	0.00	18.80	3.49	0.88
DALZ8A		18.14	2.65	0.67	17.69	2.38	0.60
DRYK4D		14.00	-1.49	-0.38	13.33	-1.98	-0.50
DWRNN6		15.60	0.11	0.03	14.71	-0.60	-0.15
FAR27E	X	73.43	57.94	14.69	76.19	60.87	15.33
FPLR2B		12.00	-3.49	-0.88	10.67	-4.65	-1.17
GFRZU9		16.00	0.51	0.13	16.33	1.02	0.26
H3HRJ4		15.50	0.01	0.00	14.17	-1.15	-0.29
HA78HA		16.33	0.84	0.21	13.33	-1.98	-0.50
L7E8T4		14.67	-0.82	-0.21	15.00	-0.31	-0.08
M37LAV		13.99	-1.50	-0.38	14.57	-0.74	-0.19
M86TYZ		15.00	-0.49	-0.12	13.67	-1.65	-0.41
MA8QAR		14.67	-0.82	-0.21	14.00	-1.31	-0.33
NTB6XW	*	28.36	12.87	3.26	28.24	12.92	3.26
PEBLVY		14.17	-1.32	-0.34	12.63	-2.68	-0.67
RJGP6X		14.70	-0.79	-0.20	16.36	1.05	0.26
RVUCUP		15.03	-0.46	-0.12	15.63	0.32	0.08
RYU8TR		14.75	-0.74	-0.19	15.39	0.07	0.02
TZZ9TV		14.90	-0.59	-0.15	16.30	0.99	0.25
V728GQ		6.67	-8.82	-2.24	7.33	-7.98	-2.01
WB6JWN		13.00	-2.49	-0.63	13.33	-1.98	-0.50
X2JFNN		16.00	0.51	0.13	14.33	-0.98	-0.25
X4JXFN		15.73	0.24	0.06	14.33	-0.98	-0.25



Rubber Interlaboratory Testing Program
Analysis 635
Compression Set Method B

Report #227
1st Qtr 2026

		Summary Statistics	
Grand Means	15.490 % Compression	15.312 % Compression	
Std Dev Btwn Labs	3.945 % Compression	3.971 % Compression	
Statistics based on 31 of 32 reporting participants			

Samples N61: EPDM Compound & N62: EPDM Compound

Comments on Assigned Data Flags for Test #635

FAR27E (X) - Extreme Data.

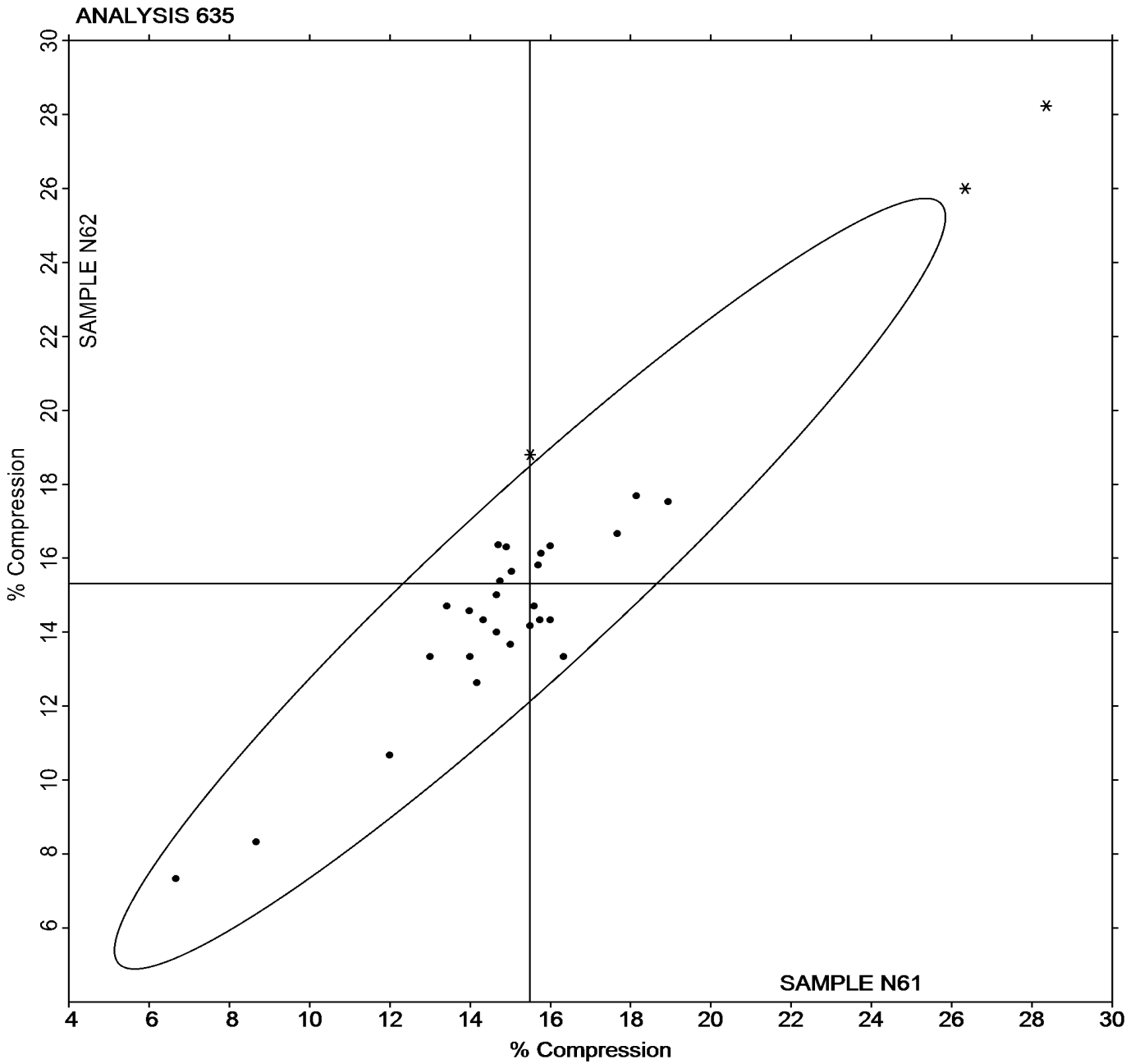


Rubber Interlaboratory Testing Program
Analysis 635
Compression Set Method B

Report #227
1st Qtr 2026

Grand Mean Sample N61 = 15.490 % Compression

Grand Mean Sample N62 = 15.312 % Compression





Rubber Interlaboratory Testing Program
Analysis 640
O-Ring Tensile Strength at Break (psi)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		1,958.7	-27.6	-0.30	2,033.7	59.1	0.67
4Q2YDH		1,883.6	-102.7	-1.10	1,878.0	-96.6	-1.09
7URZFA		1,850.2	-136.1	-1.46	1,786.8	-187.8	-2.11
BZH4B9		2,115.0	128.7	1.38	2,048.2	73.6	0.83
FPLR2B		1,985.4	-0.9	-0.01	2,022.2	47.6	0.54
GCE8V3		2,027.3	41.0	0.44	1,947.4	-27.2	-0.31
M37LAV		2,104.8	118.5	1.27	2,049.7	75.1	0.85
MA8QAR		2,016.0	29.7	0.32	1,991.8	17.2	0.19
PZRRQ2		2,072.0	85.7	0.92	2,015.2	40.6	0.46
RJGP6X		1,890.9	-95.4	-1.02	2,035.2	60.6	0.68
RYU8TR		1,913.6	-72.7	-0.78	1,964.7	-9.9	-0.11
V728GQ		2,100.0	113.7	1.22	2,061.4	86.8	0.98
X2JFNN		1,904.8	-81.5	-0.87	1,835.4	-139.2	-1.57

Summary Statistics	
Grand Means	1,986.35 psi 1,974.59 psi
Std Dev Btwn Labs	93.23 psi 88.87 psi
Statistics based on 13 of 13 reporting participants	

Samples RA61: FKM O-Ring & RA62: FKM O-Ring

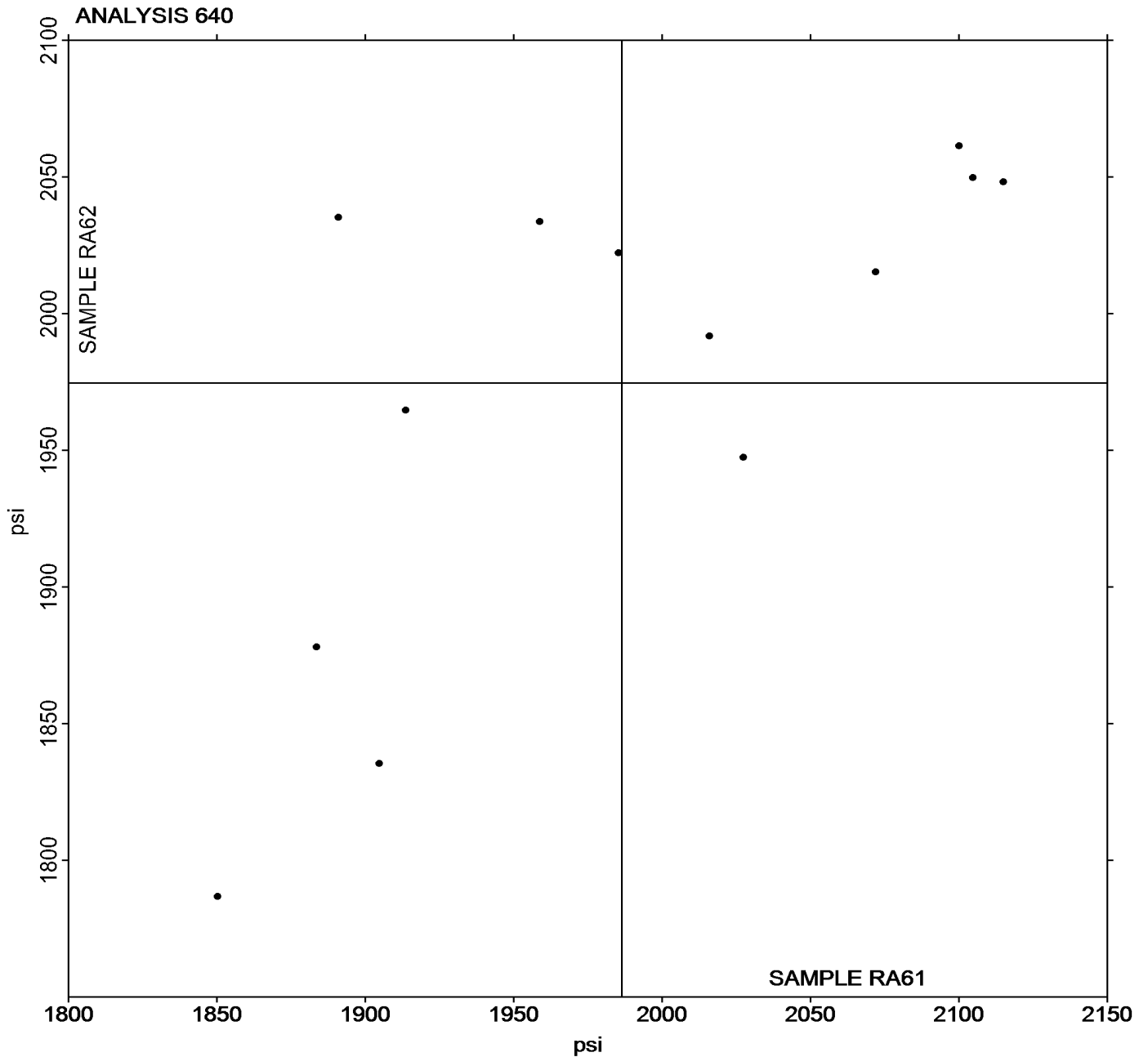


Rubber Interlaboratory Testing Program
Analysis 640
O-Ring Tensile Strength at Break (psi)

Report #227
1st Qtr 2026

Grand Mean Sample **RA61** = 1,986.35 psi

Grand Mean Sample **RA62** = 1,974.59 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 641
O-Ring Ultimate Elongation (%)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		205.8	15.1	0.65	210.2	20.2	0.88
4Q2YDH		167.6	-23.1	-1.00	173.2	-16.8	-0.74
7URZFA		191.6	0.9	0.04	189.6	-0.4	-0.02
BZH4B9		215.6	24.9	1.08	213.6	23.6	1.03
FPLR2B		124.8	-65.9	-2.85	126.4	-63.6	-2.79
GCE8V3		199.1	8.4	0.36	194.2	4.2	0.18
M37LAV		188.2	-2.5	-0.11	187.1	-2.9	-0.13
MA8QAR		201.6	10.9	0.47	198.4	8.4	0.37
PZRRQ2		198.6	7.9	0.34	191.4	1.4	0.06
RJGP6X		191.9	1.2	0.05	202.0	12.0	0.52
RYU8TR		208.8	18.1	0.78	215.2	25.2	1.10
V728GQ		186.4	-4.3	-0.19	180.6	-9.4	-0.41
X2JFNN		199.4	8.7	0.38	188.4	-1.6	-0.07

Summary Statistics			
Grand Means	190.72 percent	190.03 percent	
Std Dev Btwn Labs	23.10 percent	22.84 percent	
			Statistics based on 13 of 13 reporting participants

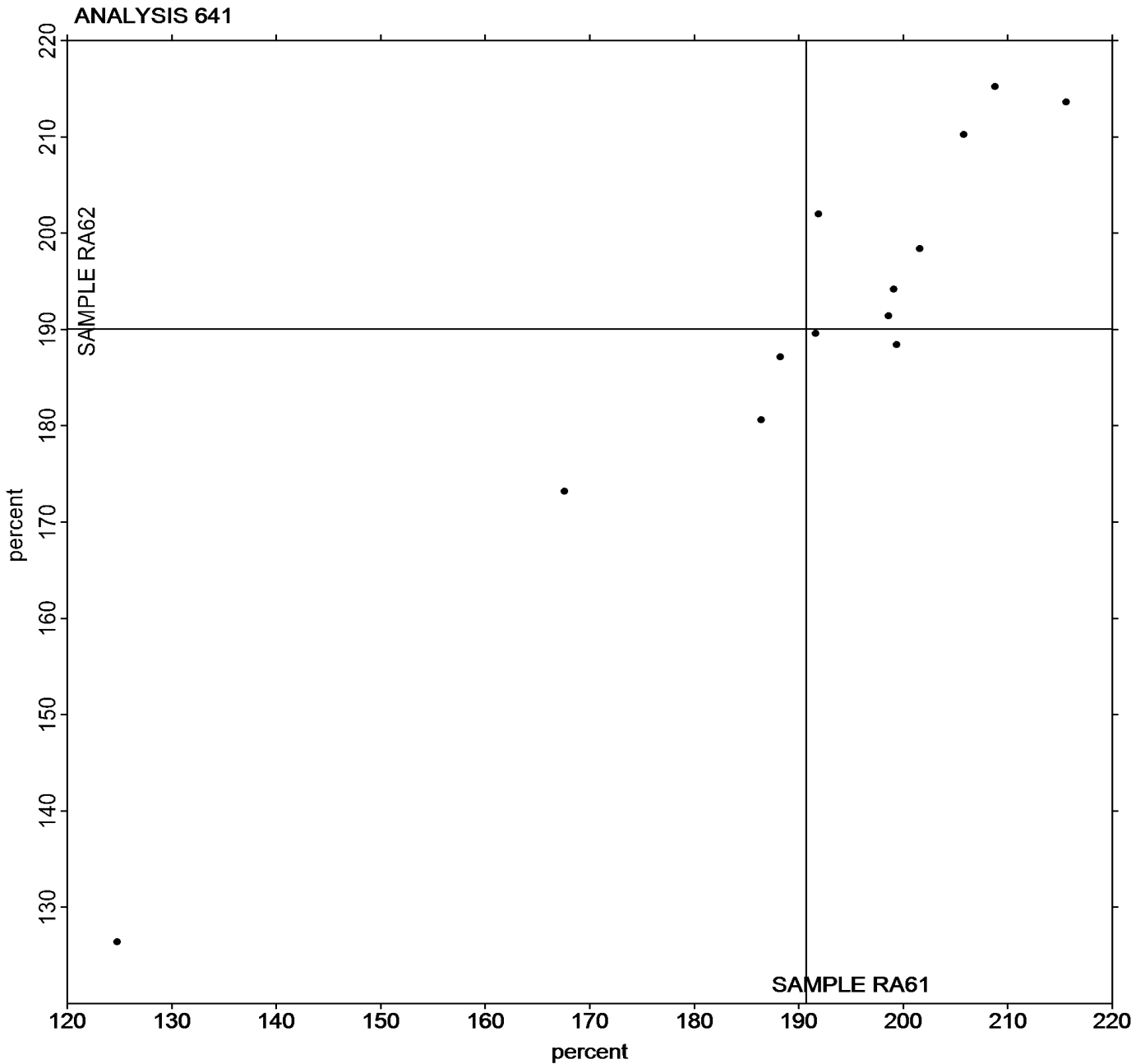
Samples RA61: FKM O-Ring & RA62: FKM O-Ring



O-Ring Ultimate Elongation (%)

Grand Mean Sample RA61 = 190.72 percent

Grand Mean Sample RA62 = 190.03 percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 642
O-Ring Stress at 100% Elongation (psi)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		737.9	-140.4	-1.47	746.8	-129.2	-1.42
4Q2YDH		1,012.8	134.5	1.41	960.0	83.9	0.92
7URZFA		900.0	21.7	0.23	920.0	43.9	0.48
BZH4B9		785.8	-92.5	-0.97	773.8	-102.3	-1.12
GCE8V3		883.5	5.1	0.05	870.4	-5.7	-0.06
M37LAV		1,005.7	127.4	1.33	981.9	105.8	1.16
MA8QAR		881.0	2.7	0.03	882.0	5.9	0.07
PZRRQ2		923.0	44.7	0.47	925.3	49.3	0.54
RJGP6X		863.3	-15.0	-0.16	865.6	-10.4	-0.11
RYU8TR		738.2	-140.1	-1.47	729.5	-146.5	-1.61
V728GQ		988.4	110.1	1.15	1,012.6	136.5	1.50
X2JFNN		820.4	-57.9	-0.61	844.8	-31.3	-0.34

Grand Means		Summary Statistics	
	878.34 psi		876.07 psi
Stnd Dev Btwn Labs	95.54 psi		90.97 psi
Statistics based on 12 of 12 reporting participants			

Samples RA61: FKM O-Ring & RA62: FKM O-Ring

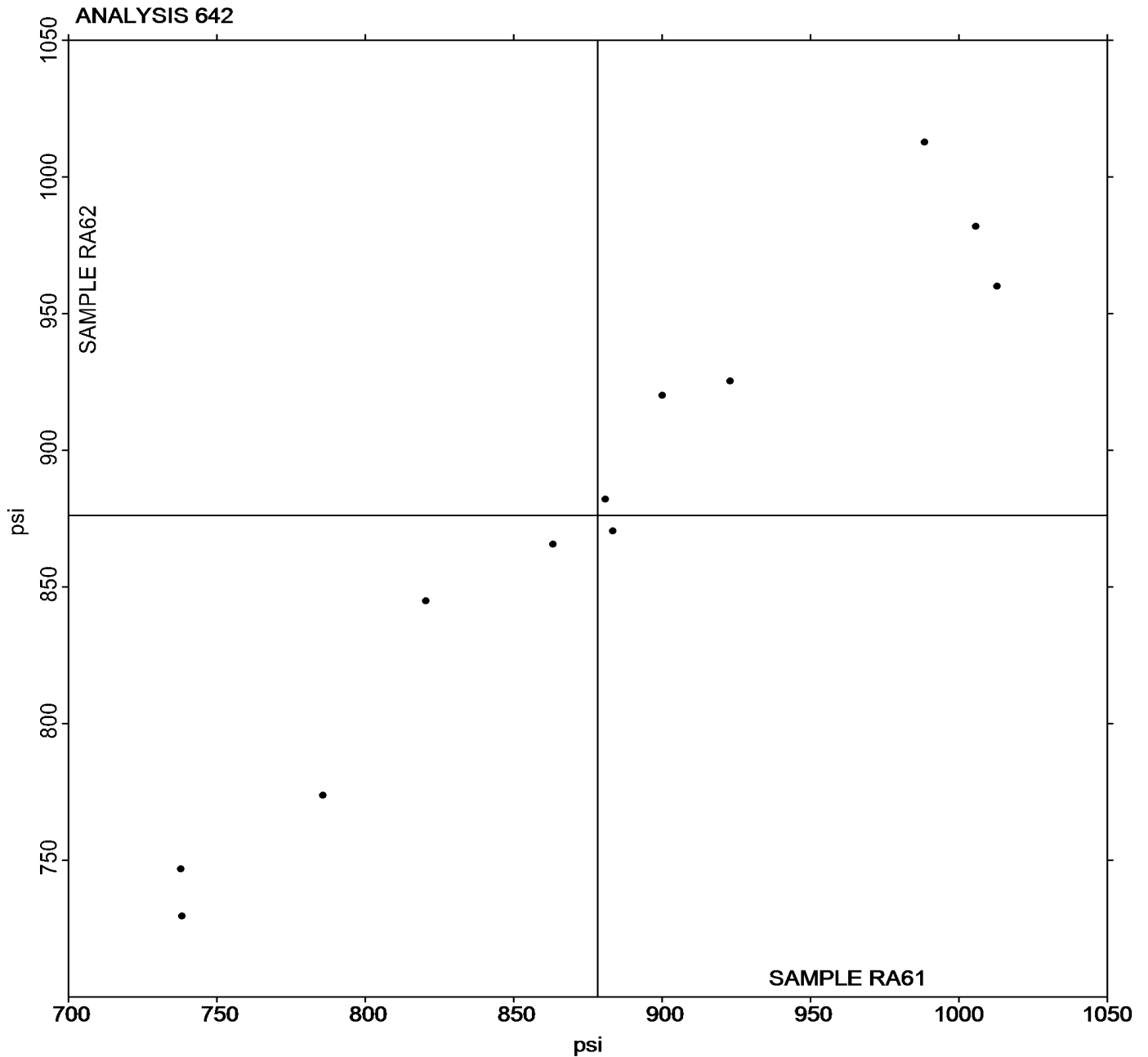


Rubber Interlaboratory Testing Program
Analysis 642
O-Ring Stress at 100% Elongation (psi)

Report #227
1st Qtr 2026

Grand Mean Sample **RA61** = 878.34 psi

Grand Mean Sample **RA62** = 876.07 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 647
O-Ring Hardness (Shore A)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		77.26	-0.50	-0.20	77.36	-0.39	-0.13
4Q2YDH		77.62	-0.14	-0.06	77.70	-0.05	-0.02
7URZFA		77.44	-0.32	-0.13	77.78	0.03	0.01
BZH4B9		77.90	0.14	0.05	77.90	0.15	0.05
FPLR2B		81.30	3.54	1.40	81.68	3.93	1.36
GCE8V3		76.40	-1.36	-0.54	76.00	-1.75	-0.60
M37LAV		71.40	-6.36	-2.52	70.80	-6.95	-2.40
MA8QAR		80.20	2.44	0.97	80.20	2.45	0.85
NEGF3Z		80.20	2.44	0.97	80.00	2.25	0.78
PZRRQ2		76.56	-1.20	-0.48	76.30	-1.45	-0.50
RJGP6X		76.00	-1.76	-0.70	74.60	-3.15	-1.09
RYU8TR		77.20	-0.56	-0.22	77.74	-0.01	0.00
V728GQ		78.20	0.44	0.17	78.40	0.65	0.23
X2JFNN		81.00	3.24	1.28	82.00	4.25	1.47

Summary Statistics	
Grand Means	77.763 Type A 77.747 Type A
Std Dev Btwn Labs	2.522 Type A 2.890 Type A
Statistics based on 14 of 14 reporting participants	

Samples RA61: FKM O-Ring & RA62: FKM O-Ring

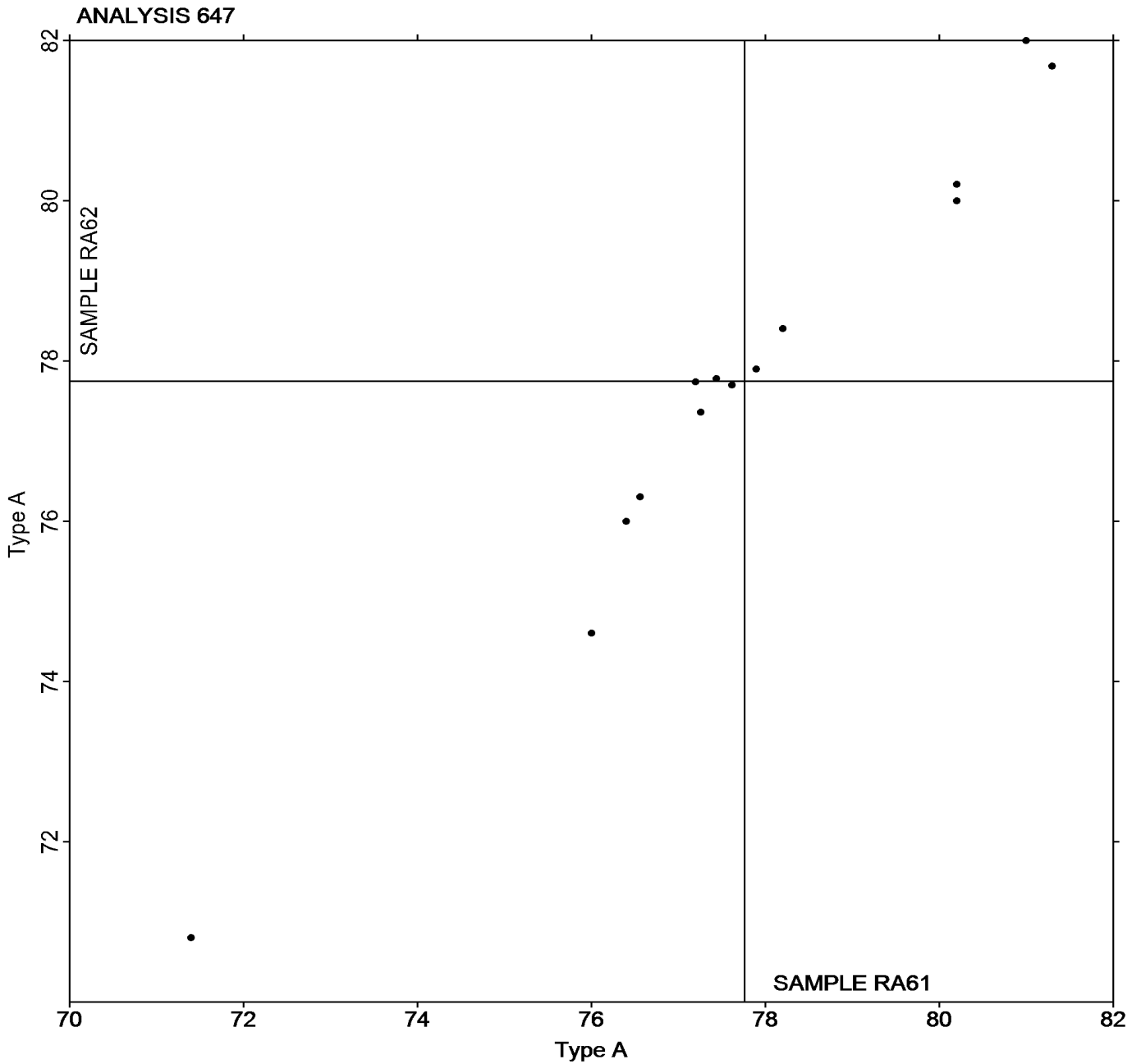


Rubber Interlaboratory Testing Program
Analysis 647
O-Ring Hardness (Shore A)

Report #227
1st Qtr 2026

Grand Mean Sample **RA61** = 77.763 Type A

Grand Mean Sample **RA62** = 77.747 Type A



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 648
O-Ring Hardness (Shore M)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
4Q2YDH		82.02	-1.02	-0.40	81.92	-1.34	-0.59
7URZFA		84.48	1.44	0.56	84.44	1.18	0.52
BZH4B9		87.80	4.76	1.86	87.80	4.54	1.99
FPLR2B		83.60	0.56	0.22	83.56	0.30	0.13
GCE8V3		79.00	-4.04	-1.58	80.80	-2.46	-1.08
MA8QAR		80.20	-2.84	-1.11	80.20	-3.06	-1.34
PZRRQ2		82.42	-0.62	-0.24	82.24	-1.02	-0.45
RJGP6X		84.60	1.56	0.61	84.60	1.34	0.59
V728GQ		81.48	-1.56	-0.61	82.04	-1.22	-0.54
X2JFNN		84.80	1.76	0.69	85.00	1.74	0.76

Summary Statistics			
Grand Means	83.040	Type M	83.260
Std Dev Btwn Labs	2.557	Type M	2.277
Statistics based on 10 of 10 reporting participants			

Samples RA61: FKM O-Ring & RA62: FKM O-Ring

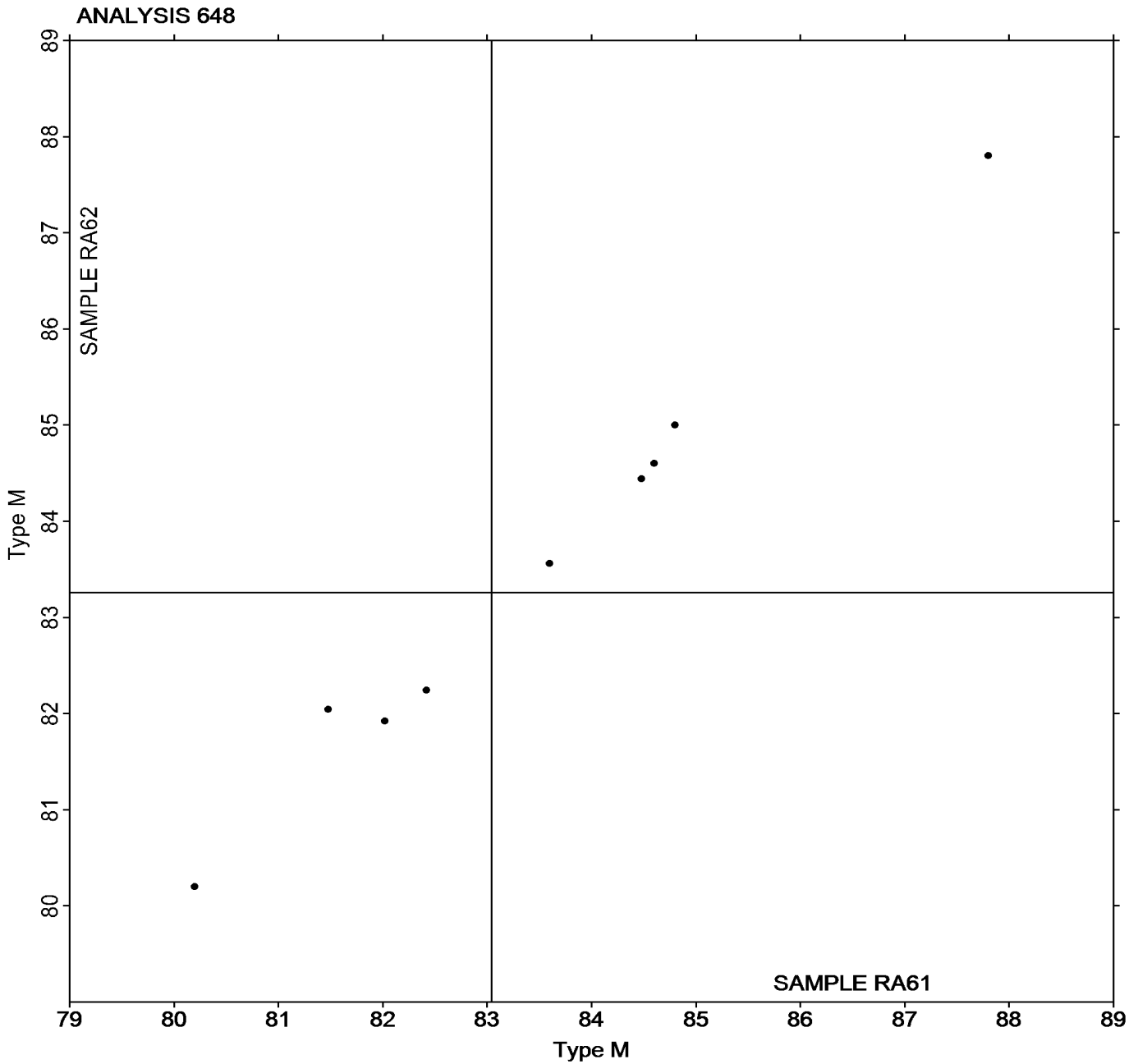


Rubber Interlaboratory Testing Program
Analysis 648
O-Ring Hardness (Shore M)

Report #227
1st Qtr 2026

Grand Mean Sample **RA61** = 83.040 Type M

Grand Mean Sample **RA62** = 83.260 Type M



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 649
O-Ring Density

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA61			Sample RA62		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		1.846	-0.001	-0.17	1.847	0.001	0.29
4Q2YDH		1.846	-0.001	-0.17	1.847	0.000	0.02
4QVWBG		1.842	-0.004	-0.83	1.846	-0.001	-0.24
7URZFA		1.847	0.000	-0.04	1.848	0.001	0.39
BZH4B9		1.846	-0.001	-0.15	1.844	-0.002	-0.58
FPLR2B		1.846	-0.001	-0.17	1.845	-0.001	-0.36
GCE8V3		1.853	0.006	1.20	1.847	0.001	0.22
M37LAV		1.838	-0.009	-1.72	1.843	-0.003	-1.00
MA8QAR		1.839	-0.008	-1.42	1.839	-0.008	-2.28
PZRRQ2		1.853	0.006	1.16	1.853	0.006	1.85
RJGP6X		1.849	0.002	0.31	1.851	0.004	1.27
RYU8TR		1.850	0.003	0.57	1.849	0.003	0.82
V728GQ		1.844	-0.003	-0.53	1.845	-0.002	-0.53
X2JFNN		1.857	0.011	1.94	1.847	0.000	0.11

Summary Statistics	
Grand Means	1.8469 g/cm ³ (Mg/m ³) 1.8464 g/cm ³ (Mg/m ³)
Stnd Dev Btwn Labs	0.0054 g/cm ³ (Mg/m ³) 0.0034 g/cm ³ (Mg/m ³)
Statistics based on 14 of 14 reporting participants	

Samples RA61: FKM O-Ring & RA62: FKM O-Ring

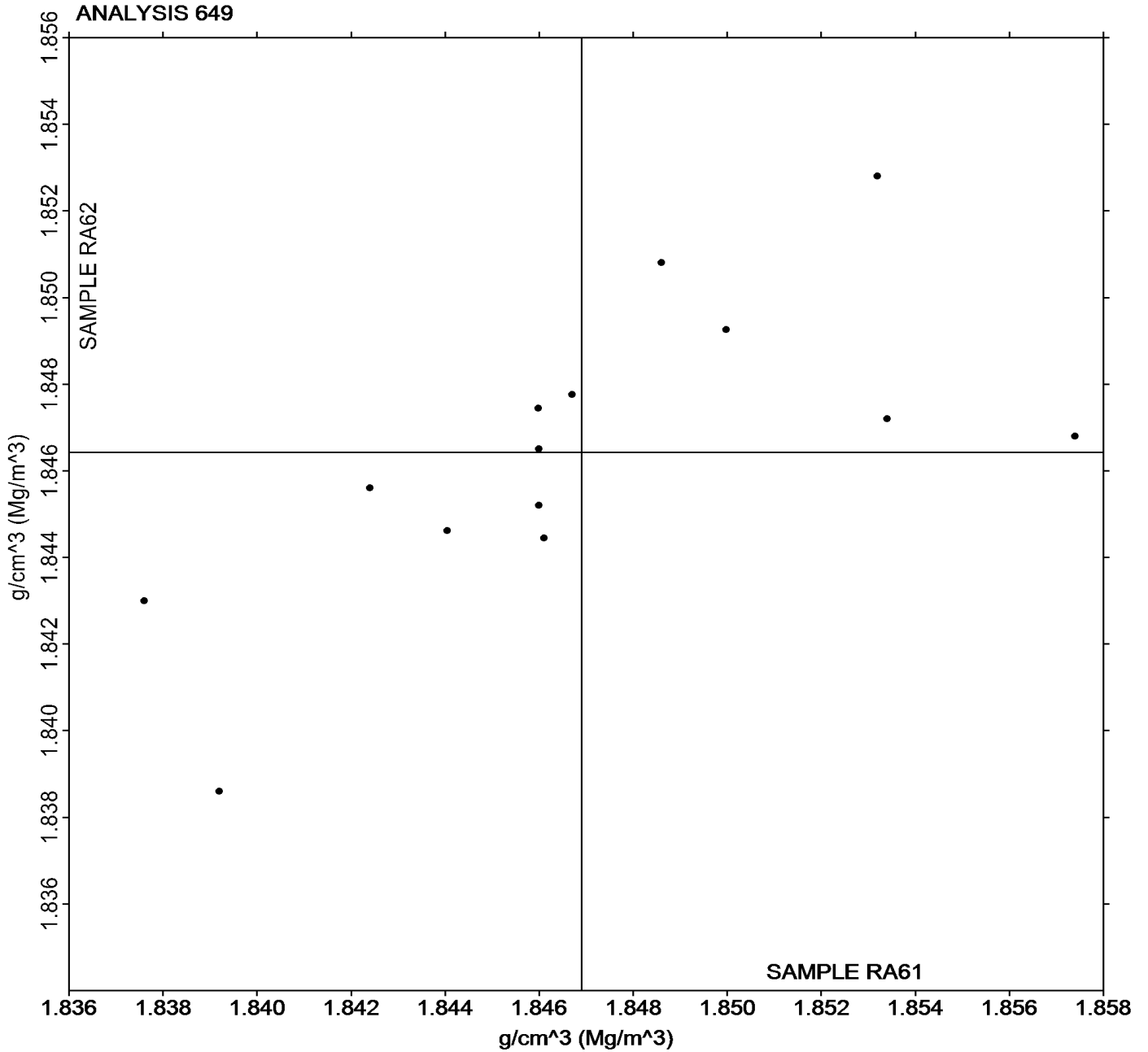


Rubber Interlaboratory Testing Program
Analysis 649
O-Ring Density

Report #227
1st Qtr 2026

Grand Mean Sample **RA61** = 1.8469 g/cm³
(Mg/m³)

Grand Mean Sample **RA62** = 1.8464 g/cm³
(Mg/m³)



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 650
O-Ring Compression Set Method B

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample RA63			Sample RA64		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
448ZWF		8.767	-0.070	-0.10	8.800	0.636	0.51
4Q2YDH		8.000	-0.836	-1.17	8.333	0.170	0.14
7URZFA		8.820	-0.016	-0.02	8.820	0.656	0.53
BZH4B9		9.000	0.164	0.23	9.000	0.836	0.67
M37LAV		9.353	0.517	0.72	8.500	0.336	0.27
MA8QAR		9.000	0.164	0.23	5.000	-3.164	-2.54
RJGP6X		7.433	-1.403	-1.96	7.413	-0.750	-0.60
RYU8TR		9.990	1.154	1.61	9.437	1.273	1.02
V728GQ		8.667	-0.170	-0.24	8.000	-0.164	-0.13
X2JFNN		9.333	0.497	0.70	8.333	0.170	0.14

Summary Statistics	
Grand Means	8.8363 % Compression 8.1637 % Compression
Std Dev Btwn Labs	0.7150 % Compression 1.2439 % Compression
Statistics based on 10 of 10 reporting participants	

Samples RA63: FKM O-Ring & RA64: FKM O-Ring

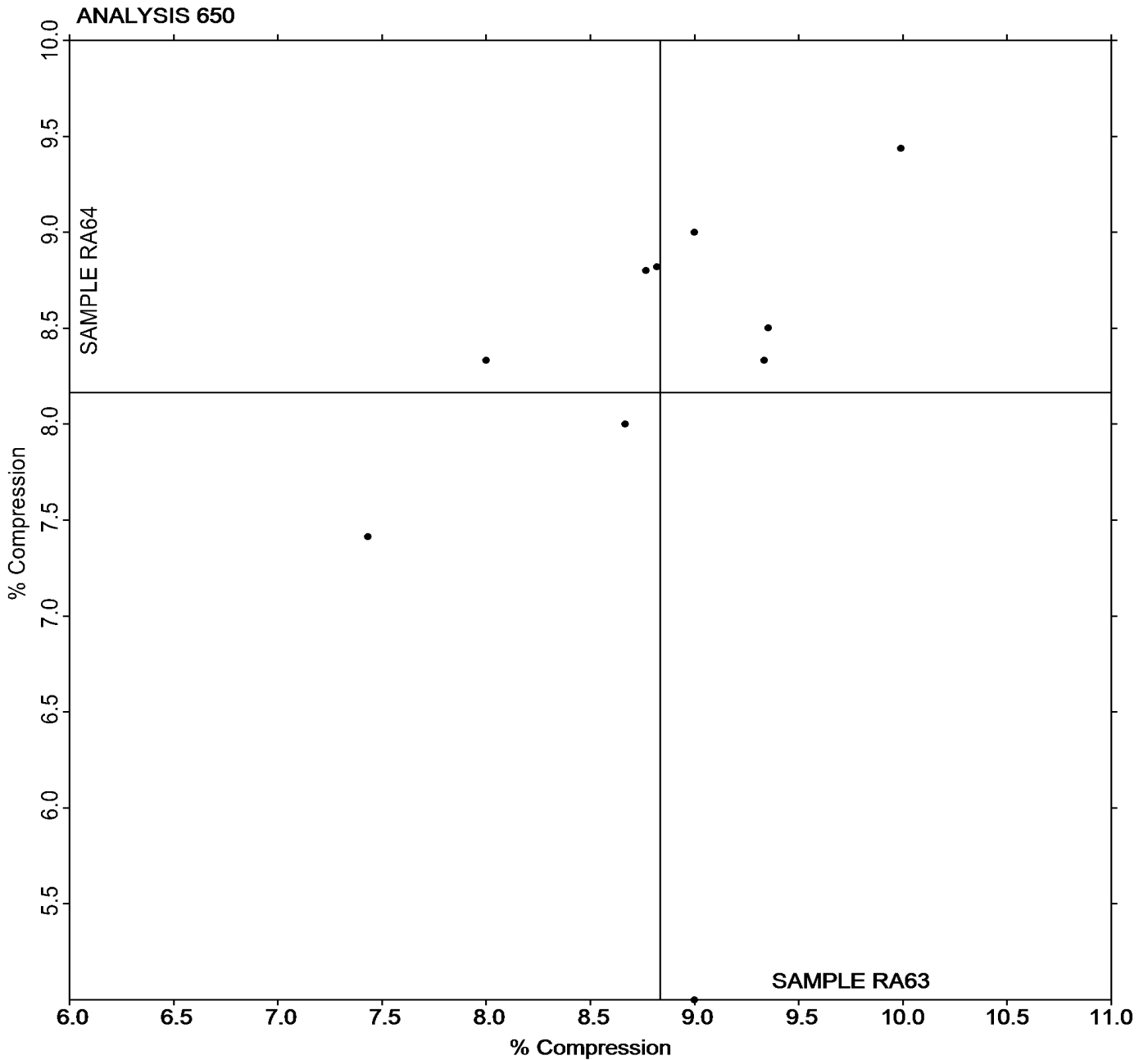


Rubber Interlaboratory Testing Program
Analysis 650
O-Ring Compression Set Method B

Report #227
1st Qtr 2026

Grand Mean Sample **RA63** = 8.8363 % Compression

Grand Mean Sample **RA64** = 8.1637 % Compression



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 660

1st Qtr 2026

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

WebCode	Data Flag	Sample S61-S62			Sample S63-S64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		46.87	-1.21	-0.96	53.26	-0.98	-0.36	MR
43CGVD		47.30	-0.78	-0.62	53.38	-0.85	-0.32	MR
9AUQZC	X	29.59	-18.50	-14.63	38.06	-16.17	-6.04	MR
A38XNC		48.83	0.75	0.59	55.05	0.82	0.31	MR
AXGMDD		49.22	1.14	0.90	58.05	3.82	1.43	TA
CQ9YXH		47.90	-0.18	-0.14	53.70	-0.53	-0.20	MR
D7H3Y3		49.91	1.83	1.45	56.21	1.98	0.74	MV
DALZ8A		45.20	-2.89	-2.28	46.95	-7.28	-2.72	ML
HCCPG6		48.52	0.43	0.34	55.85	1.62	0.60	MV
MJCXPR		48.02	-0.06	-0.05	54.02	-0.21	-0.08	MR
PN4RZY		49.13	1.05	0.83	55.37	1.13	0.42	MR
V4UPHV		47.47	-0.61	-0.49	55.03	0.80	0.30	ML
WP8TZX		48.62	0.54	0.42	53.93	-0.30	-0.11	MR
X2JFNN	M	51.07	2.99	2.36	No data reported for this sample			MR

Summary Statistics	
Grand Means	
48.081 ML 1 + 4	54.232 ML 1 + 4
Stnd Dev Btwn Labs	
1.264 ML 1 + 4	2.677 ML 1 + 4
Statistics based on 12 of 14 reporting participants	

Samples S61-S62: NBR & S63-S64: Butyl

Comments on Assigned Data Flags for Test #660

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

X2JFNN (M) - Participant did not submit data for sample group S63-S64.

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	TA	TA Instruments (any model)

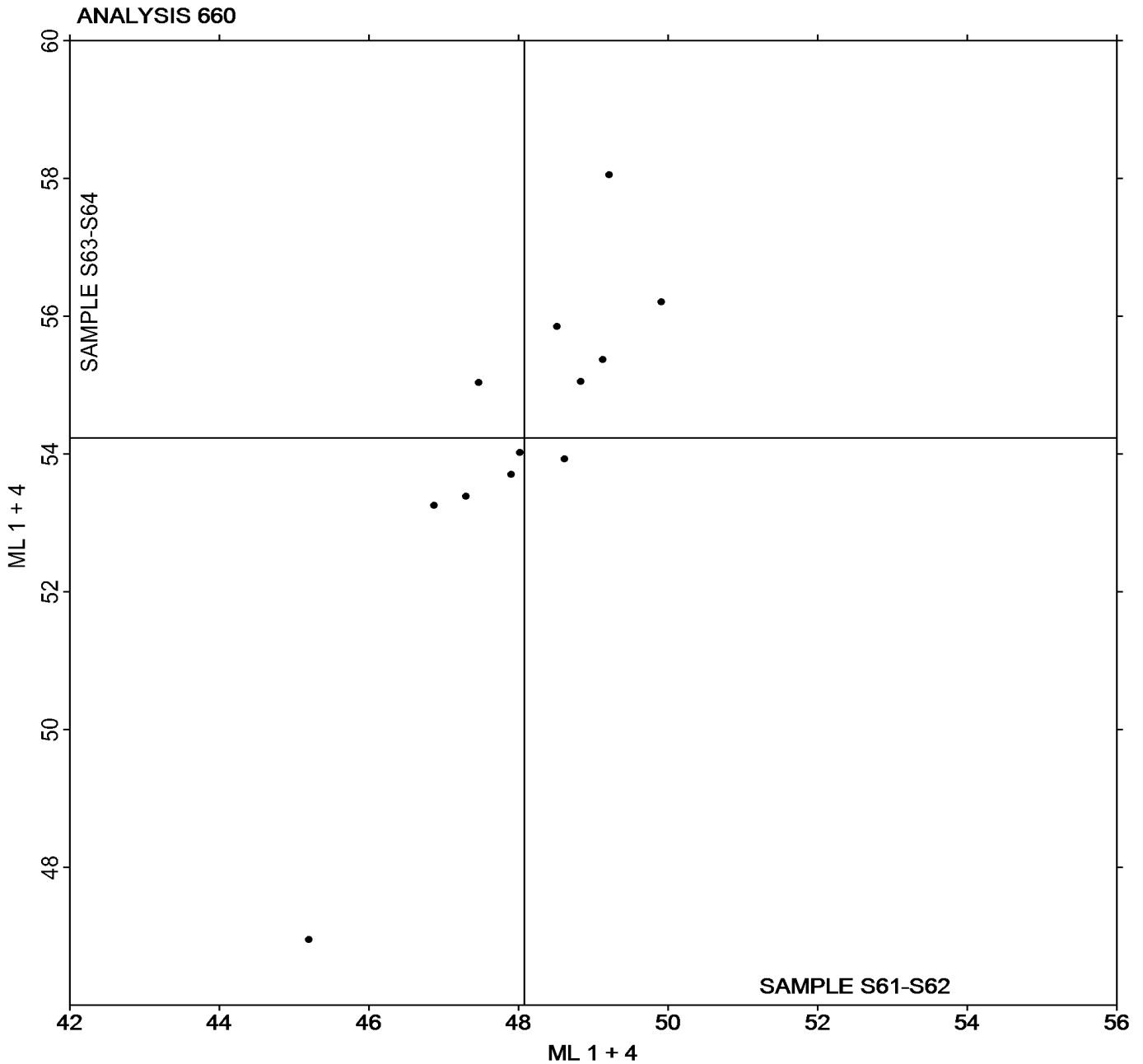


Rubber Interlaboratory Testing Program
Analysis 660
Mooney Viscosity: 4-minute readings (ML 1 + 4)

Report #227
1st Qtr 2026

Grand Mean Sample **S61-S62** = 48.081 ML 1 + 4

Grand Mean Sample = 54.232 ML 1 + 4



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 661

1st Qtr 2026

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

WebCode	Data Flag	Sample S61-S62			Sample S63-S64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		46.87	-1.17	-0.89	51.05	-1.69	-1.11	MR
43CGVD		47.30	-0.74	-0.56	51.08	-1.65	-1.09	MR
9AUQZC	X	29.59	-18.46	-14.00	35.72	-17.02	-11.18	MR
A38XNC		48.83	0.79	0.60	52.52	-0.22	-0.15	MR
AXGMDD		49.22	1.18	0.89	54.77	2.03	1.33	TA
CQ9YXH		47.90	-0.14	-0.11	51.22	-1.52	-1.00	MR
D7H3Y3		49.91	1.87	1.42	55.75	3.01	1.98	MV
DALZ8A		45.20	-2.85	-2.16	53.93	1.19	0.78	MR
HCCPG6	X	48.52	0.47	0.36	93.16	40.42	26.55	MV
MJCXPR		48.02	-0.02	-0.02	52.15	-0.59	-0.39	MR
PN4RZY		49.13	1.09	0.82	52.65	-0.09	-0.06	MR
V4UPHV		47.47	-0.57	-0.44	52.83	0.10	0.06	ML
WP8TZX		48.62	0.58	0.44	52.19	-0.55	-0.36	MR

Summary Statistics	
Grand Means	
48.042 ML 1 + 8	52.738 ML 1 + 8
Std Dev Btwn Labs	
1.318 ML 1 + 8	1.523 ML 1 + 8
Statistics based on 11 of 13 reporting participants	

Samples S61-S62: NBR & S63-S64: Butyl

Comments on Assigned Data Flags for Test #661

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

HCCPG6 (X) - Extreme Data for sample group S63-S64.

Key to Instrument Codes Reported by Participants

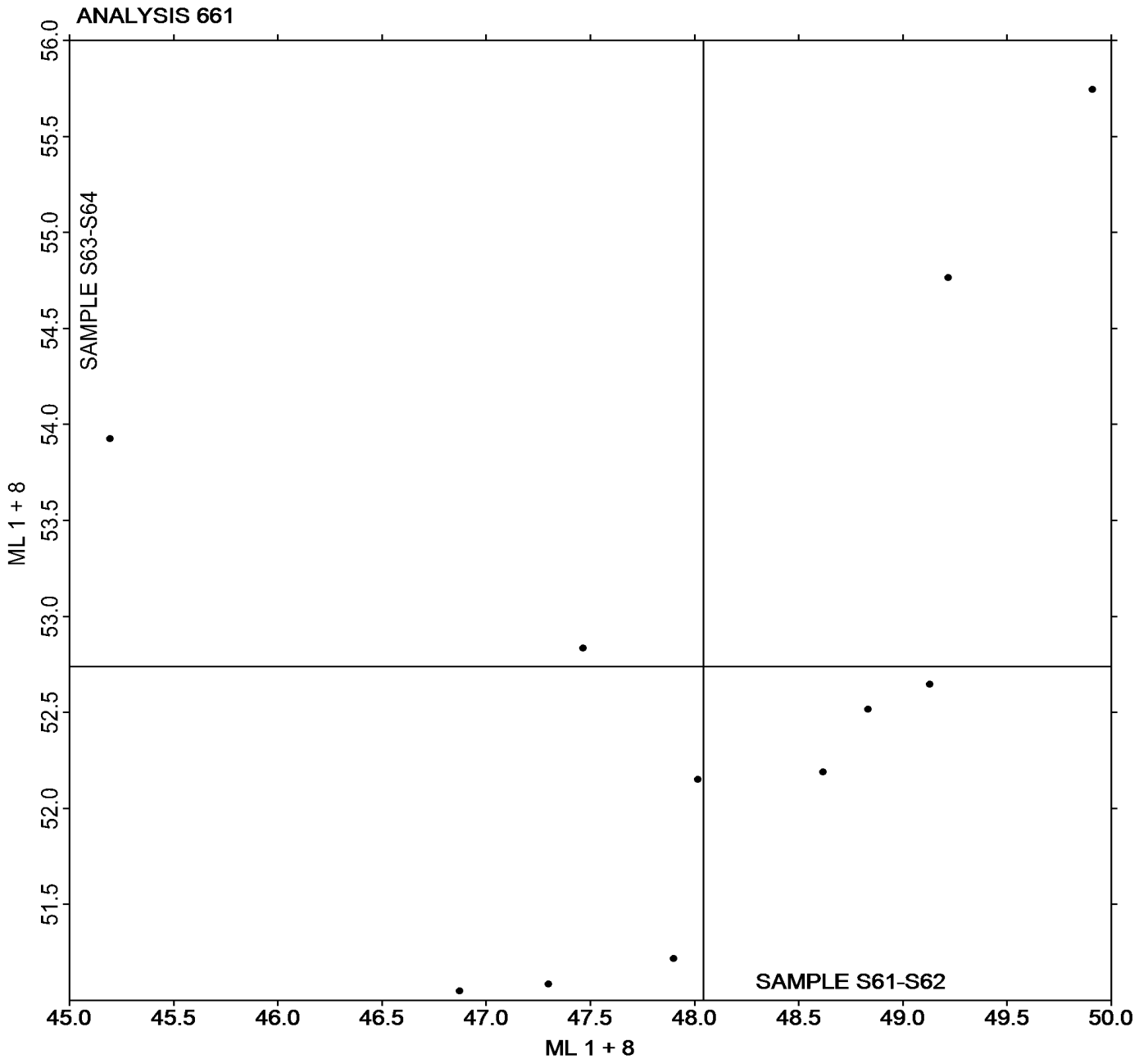
ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	Montech	TA	TA Instruments (any model)



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

Grand Mean Sample S61-S62 = 48.042 ML 1 + 8

Grand Mean Sample S63-S64 = 52.738 ML 1 + 8



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 662

1st Qtr 2026

Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample S61-S62			Sample S63-S64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		5.430	0.334	1.03	6.730	0.168	0.84	MR
HCCPG6		4.782	-0.314	-0.97	6.340	-0.222	-1.11	MV
V4UPHV		5.075	-0.021	-0.06	6.615	0.053	0.27	ML

Grand Means		Summary Statistics	
	5.0956 seconds		6.5617 seconds
Std Dev Btwn Labs	0.3247 seconds		0.2004 seconds
Statistics based on 3 of 3 reporting participants			

Samples S61-S62: NBR & S63-S64: Butyl

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech		

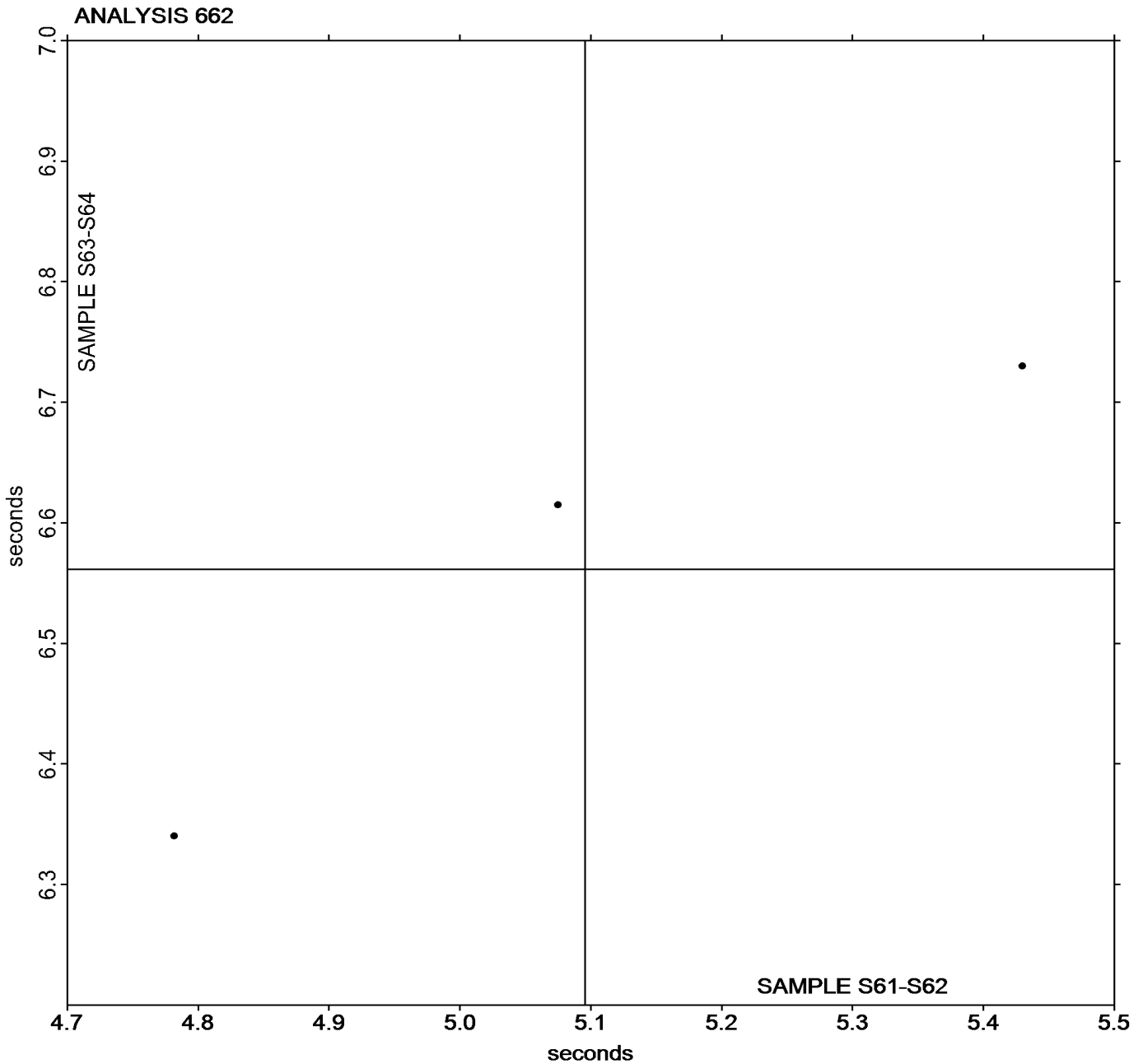


Rubber Interlaboratory Testing Program
Analysis 662
Mooney Stress Relaxation: t80 (seconds)

Report #227
1st Qtr 2026

Grand Mean Sample **S61-S62** = 5.0956 seconds

Grand Mean Sample **S63-S64** = 6.5617 seconds



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 663

1st Qtr 2026

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample S61-S62			Sample S63-S64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		91.01	-0.06	-0.50	93.84	0.32	0.95	MR
HCCPG6		91.00	-0.08	-0.65	93.16	-0.36	-1.04	MV
V4UPHV		91.22	0.14	1.15	93.54	0.03	0.09	ML

Summary Statistics	
Grand Means	
	91.076 percent
	93.512 percent
Std Dev Btwn Labs	
	0.125 percent
	0.340 percent
	Statistics based on 3 of 3 reporting participants

Samples S61-S62: NBR & S63-S64: Butyl

Key to Instrument Codes Reported by Participants

- ML Alpha Technologies/Monsanto model not specified
- MV Montech
- MR Alpha Technologies Model MV2000/MV2000E

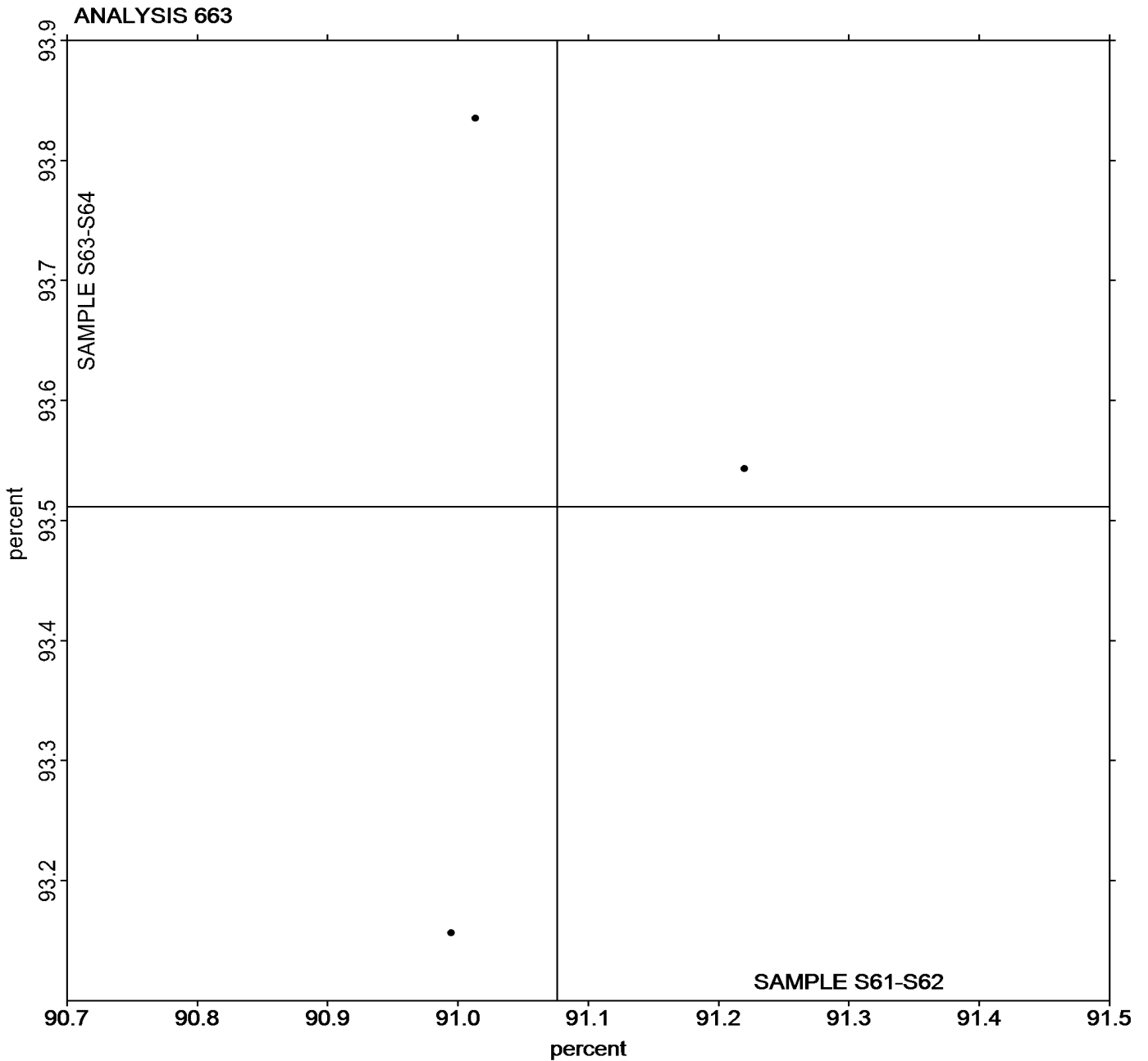


Rubber Interlaboratory Testing Program
Analysis 663
Mooney Stress Relaxation: X30 (percent)

Report #227
1st Qtr 2026

Grand Mean Sample **S61-S62** = 91.076 percent

Grand Mean Sample **S63-S64** = 93.512 percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 664

1st Qtr 2026

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

WebCode	Data Flag	Sample S61-S62			Sample S63-S64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		457.5	-1.0	-0.10	374.3	-18.2	-1.00	MR
HCCPG6		468.6	10.1	1.05	410.5	18.0	1.00	MV
V4UPHV		449.3	-9.1	-0.95	392.7	0.2	0.01	ML

Summary Statistics	
Grand Means	
	458.48 M-s
	392.50 M-s
Std Dev Btwn Labs	
	9.67 M-s
	18.08 M-s
Statistics based on 3 of 3 reporting participants	

Samples S61-S62: NBR & S63-S64: Butyl

Key to Instrument Codes Reported by Participants

- ML Alpha Technologies/Monsanto model not specified
- MV MonTech
- MR Alpha Technologies Model MV2000/MV2000E

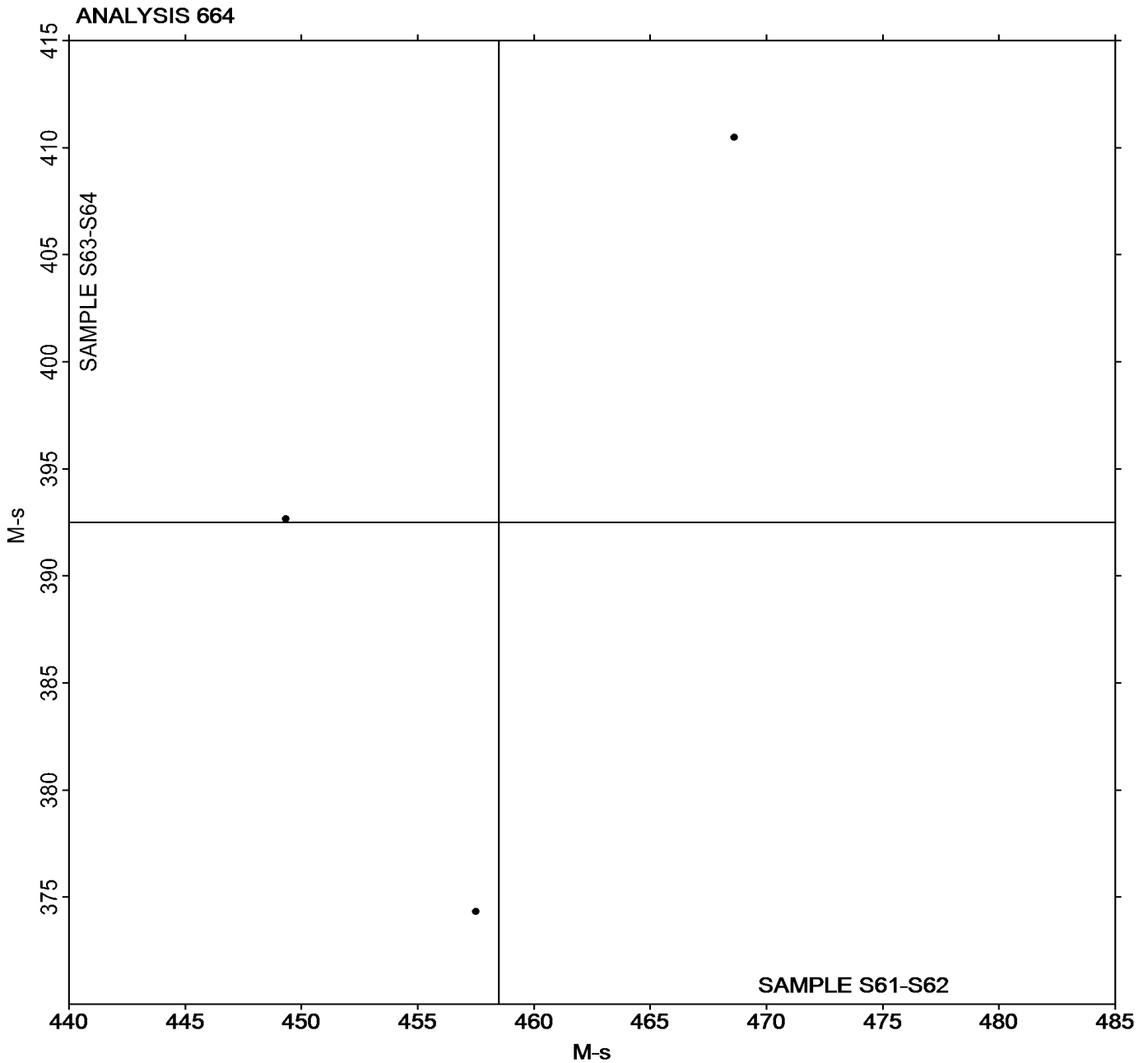


Rubber Interlaboratory Testing Program
Analysis 664
Mooney Stress Relaxation: Area under curve (M-s)

Report #227
1st Qtr 2026

Grand Mean Sample **S61-S62** = 458.48 M-s

Grand Mean Sample **S63-S64** = 392.50 M-s



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program
Analysis 684
MDR Vulcanization-Cure Time 10% (minutes)

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		3.490	0.210	1.00	1.745	0.138	0.80	ME
3QWGEK		3.598	0.318	1.52	1.632	0.025	0.14	MC
448ZWF		3.227	-0.054	-0.26	1.540	-0.067	-0.39	MC
4DAKWM		3.148	-0.132	-0.63	1.695	0.088	0.51	MM
BZH4B9		3.017	-0.264	-1.26	1.558	-0.049	-0.28	ME
D7H3Y3	*	3.130	-0.150	-0.72	1.080	-0.527	-3.06	MC
DALZ8A		2.962	-0.319	-1.52	1.813	0.206	1.20	XX
HCCPG6		3.620	0.340	1.62	1.855	0.248	1.44	XX
MA8QAR		3.328	0.048	0.23	1.500	-0.107	-0.62	MC
MJCXPR		3.500	0.220	1.05	1.680	0.073	0.42	ME
NTB6XW		3.103	-0.177	-0.84	1.740	0.133	0.77	XX
NXACMZ		3.313	0.033	0.16	1.668	0.061	0.36	XX
PN4RZY		3.220	-0.060	-0.29	1.440	-0.167	-0.97	MC
TZZ9TV		3.220	-0.060	-0.29	1.510	-0.097	-0.56	MC
V4UPHV		2.973	-0.307	-1.46	1.543	-0.064	-0.37	ME
VJPZCT		3.275	-0.005	-0.03	1.593	-0.014	-0.08	ME
WP8TZX		3.570	0.290	1.38	1.687	0.080	0.46	MC
X2JFNN		3.350	0.070	0.33	1.645	0.038	0.22	MC

Grand Means		Summary Statistics	
	3.2803 minutes		1.6069 minutes
Std Dev Btwn Labs	0.2097 minutes		0.1721 minutes
Statistics based on 18 of 18 reporting participants			

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	XX	Instrument model not specified by lab

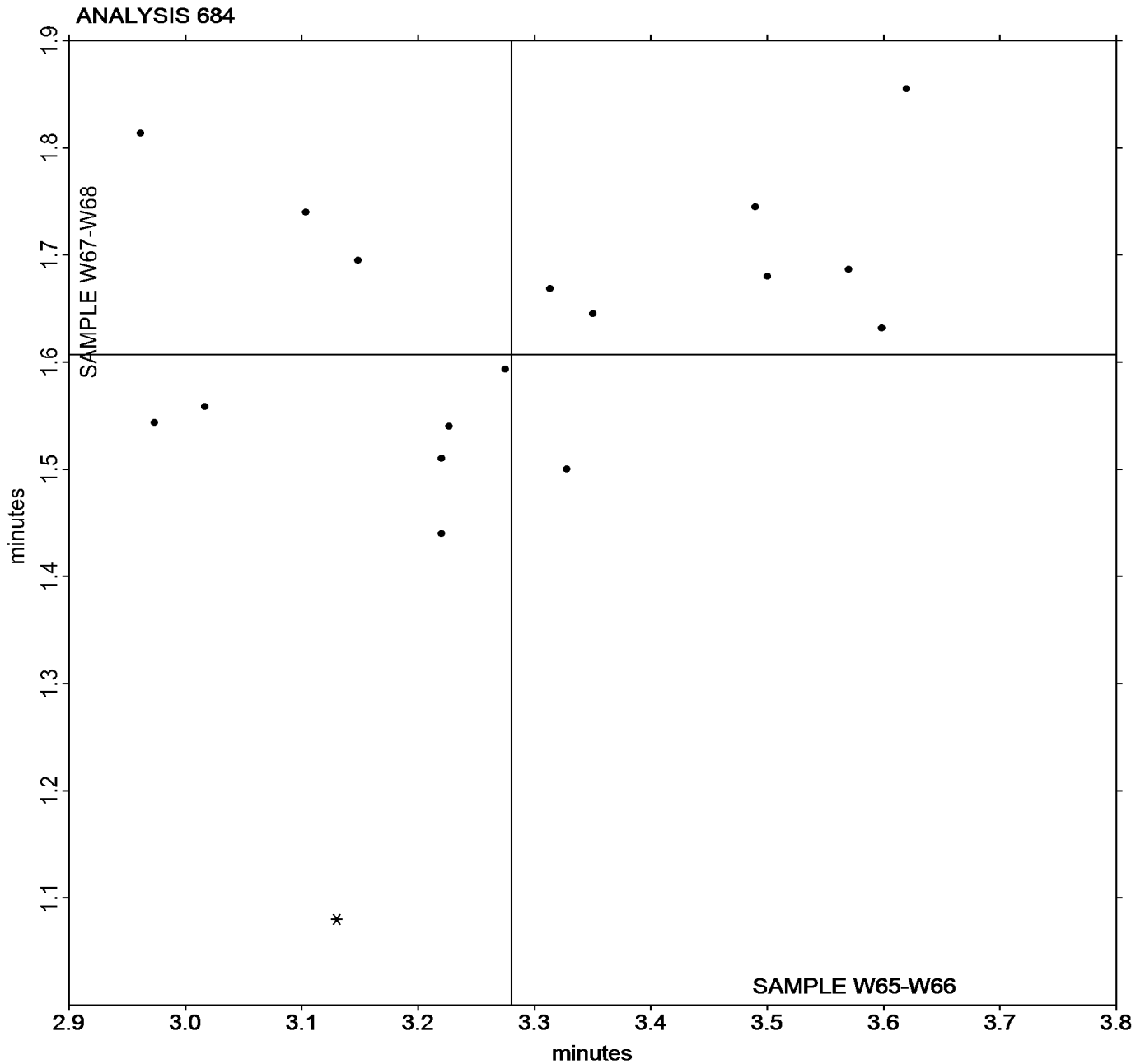


Rubber Interlaboratory Testing Program
Analysis 684
MDR Vulcanization-Cure Time 10% (minutes)

Report #227
1st Qtr 2026

Grand Mean Sample **W65-W66** = 3.2803 minutes

Grand Mean Sample **W67-W68** = 1.6069 minutes



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 685

1st Qtr 2026

MDR Vulcanization-Scorch Time, Ts1 (minutes)

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		3.170	-0.015	-0.04	1.662	0.037	0.19	ME
3QWGEK		3.493	0.308	0.77	1.715	0.090	0.47	XX
43CGVD		3.167	-0.018	-0.05	1.536	-0.089	-0.47	MC
448ZWF		3.033	-0.152	-0.38	1.572	-0.053	-0.28	MC
4DAKWM		3.525	0.340	0.85	1.868	0.243	1.27	MM
BZH4B9		2.753	-0.432	-1.08	1.517	-0.108	-0.57	ME
D7H3Y3	*	3.268	0.083	0.21	1.252	-0.373	-1.95	MC
DALZ8A		2.952	-0.233	-0.58	1.862	0.237	1.24	XX
EEQ3MB	*	1.940	-1.245	-3.10	1.110	-0.515	-2.69	MC
HCCPG6		3.812	0.627	1.56	1.890	0.265	1.39	XX
MA8QAR		3.353	0.168	0.42	1.561	-0.064	-0.33	MC
MJCXPR		3.610	0.425	1.06	1.828	0.203	1.06	ME
NTB6XW		2.903	-0.282	-0.70	1.685	0.060	0.31	XX
NXACMZ		3.493	0.308	0.77	1.715	0.090	0.47	MR
PN4RZY		3.322	0.137	0.34	1.527	-0.098	-0.51	MC
TZZ9TV		2.973	-0.212	-0.53	1.501	-0.124	-0.65	MC
V4UPHV		3.078	-0.107	-0.27	1.590	-0.035	-0.18	ME
V728GQ		2.783	-0.402	-1.00	1.600	-0.025	-0.13	MC
VJPZCT		3.347	0.162	0.40	1.677	0.052	0.27	ME
WP8TZX		3.507	0.322	0.80	1.745	0.120	0.63	MC
X2JFNN		3.405	0.220	0.55	1.712	0.087	0.45	MC

Grand Means		Summary Statistics	
	3.1851 minutes		1.6249 minutes
Std Dev Btwn Labs	0.4014 minutes		0.1911 minutes
Statistics based on 21 of 21 reporting participants			

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	MR	MonTech D-RPA 3000
XX	Instrument model not specified by lab		

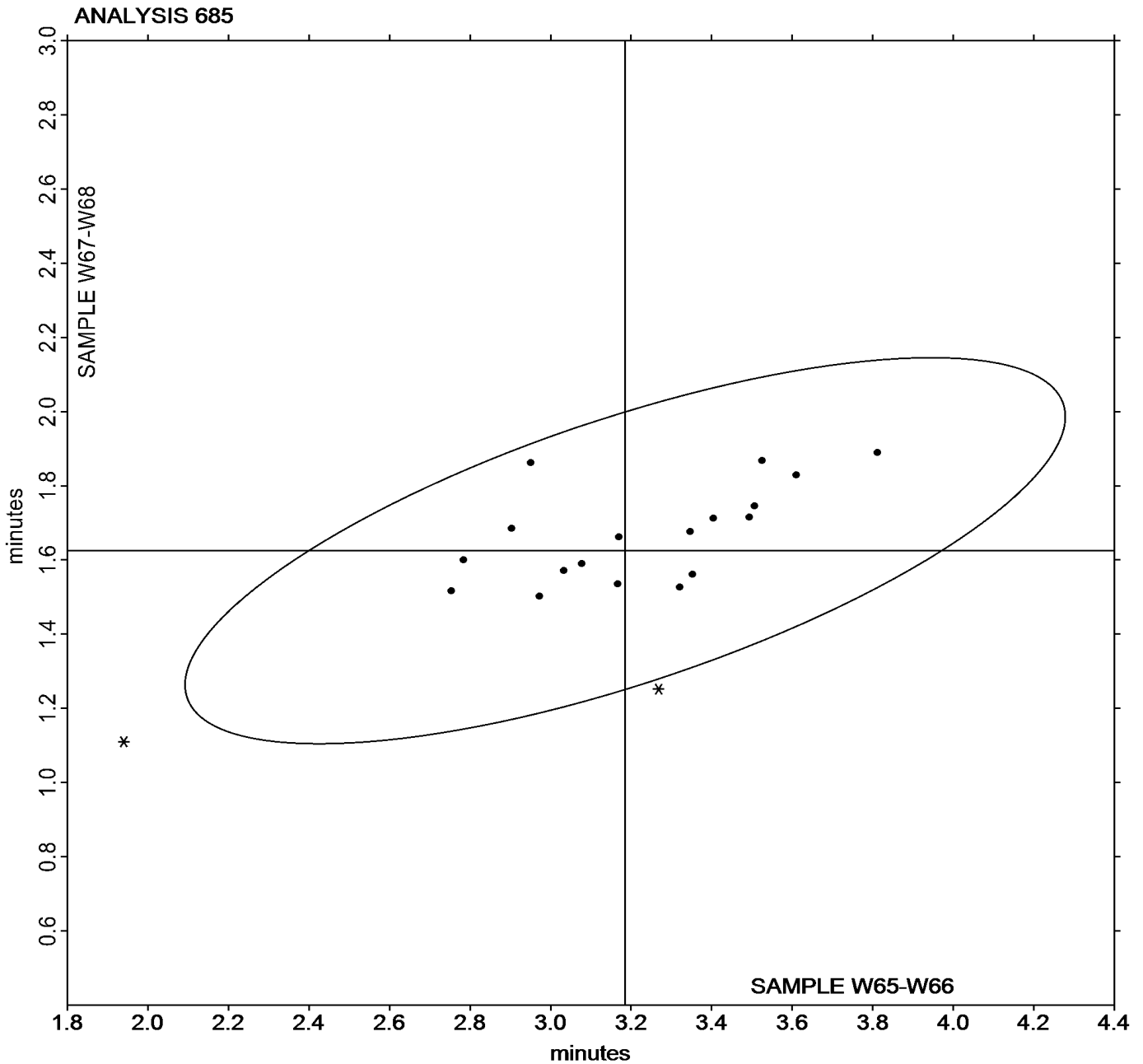


Rubber Interlaboratory Testing Program
Analysis 685
MDR Vulcanization-Scorch Time, Ts1 (minutes)

Report #227
1st Qtr 2026

Grand Mean Sample **W65-W66** = 3.1851 minutes

Grand Mean Sample **W67-W68** = 1.6249 minutes





Rubber Interlaboratory Testing Program

Report #227

Analysis 686

1st Qtr 2026

MDR Vulcanization-Cure Time 50% (minutes)

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		7.905	0.289	0.59	2.950	0.053	0.36	ME
3QWGEK		8.108	0.492	1.01	2.837	-0.060	-0.41	XX
43CGVD		8.019	0.403	0.83	2.820	-0.077	-0.53	MC
448ZWF		7.303	-0.313	-0.64	2.747	-0.150	-1.03	MC
4DAKWM		7.733	0.117	0.24	3.170	0.273	1.88	MM
BZH4B9		7.533	-0.083	-0.17	2.847	-0.050	-0.35	ME
D7H3Y3		7.765	0.149	0.30	2.762	-0.135	-0.93	MC
DALZ8A	*	7.777	0.160	0.33	3.338	0.441	3.03	XX
EEQ3MB		7.257	-0.360	-0.74	2.748	-0.149	-1.02	MC
HCCPG6		7.348	-0.268	-0.55	2.977	0.080	0.55	XX
MA8QAR		7.850	0.234	0.48	2.806	-0.091	-0.63	MC
MJCXPR		8.083	0.467	0.96	2.938	0.041	0.28	ME
NTB6XW		6.835	-0.781	-1.60	3.028	0.131	0.90	XX
NXACMZ		7.768	0.152	0.31	2.963	0.066	0.46	MR
PN4RZY		8.058	0.442	0.91	2.852	-0.045	-0.31	MC
TZZ9TV		7.960	0.344	0.70	2.895	-0.002	-0.01	MC
V4UPHV		7.062	-0.555	-1.14	2.812	-0.085	-0.59	ME
V728GQ	*	6.118	-1.498	-3.07	2.738	-0.159	-1.09	MC
VJPZCT		7.748	0.132	0.27	2.843	-0.054	-0.37	ME
WP8TZX		7.918	0.302	0.62	2.880	-0.017	-0.12	MC
X2JFNN		7.793	0.177	0.36	2.887	-0.010	-0.07	MC

Grand Means		Summary Statistics	
	7.6164 minutes		2.8970 minutes
Std Dev Btwn Labs	0.4882 minutes		0.1455 minutes
Statistics based on 21 of 21 reporting participants			

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	MR	MonTech D-RPA 3000
XX	Instrument model not specified by lab		



Rubber Interlaboratory Testing Program

Report #227

Analysis 687

1st Qtr 2026

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		11.61	0.41	0.69	9.343	-0.512	-0.50	ME
3QWGEK		11.80	0.60	1.00	8.625	-1.230	-1.20	XX
43CGVD		11.41	0.22	0.36	10.684	0.829	0.81	MC
448ZWF		10.57	-0.62	-1.04	9.907	0.051	0.05	MC
4DAKWM		11.52	0.32	0.53	10.022	0.166	0.16	MM
BZH4B9		11.14	-0.06	-0.10	9.715	-0.140	-0.14	ME
D7H3Y3		11.39	0.19	0.32	8.800	-1.055	-1.03	MC
DALZ8A		11.00	-0.20	-0.33	11.105	1.250	1.22	XX
EEQ3MB		10.80	-0.39	-0.66	10.280	0.425	0.41	MC
HCCPG6	*	11.24	0.05	0.08	6.628	-3.227	-3.15	XX
MA8QAR		11.54	0.34	0.57	9.703	-0.152	-0.15	MC
MJCXPR		11.74	0.54	0.90	10.505	0.650	0.63	ME
NTB6XW		11.16	-0.03	-0.06	9.793	-0.062	-0.06	XX
NXACMZ		11.58	0.38	0.64	10.158	0.303	0.30	MR
PN4RZY		11.49	0.29	0.48	10.335	0.480	0.47	MC
TZZ9TV		11.24	0.05	0.08	11.093	1.238	1.21	MC
V4UPHV		10.49	-0.70	-1.17	10.195	0.340	0.33	MC
V728GQ	*	9.08	-2.11	-3.52	10.650	0.795	0.78	XX
VJPZCT		11.18	-0.01	-0.02	10.855	1.000	0.98	ME
WP8TZX		11.68	0.49	0.81	8.800	-1.055	-1.03	MC
X2JFNN		11.45	0.25	0.42	9.765	-0.090	-0.09	MC

Grand Means		Summary Statistics	
	11.196 minutes		9.8553 minutes
Std Dev Btwn Labs	0.600 minutes		1.0235 minutes
Statistics based on 21 of 21 reporting participants			

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	MR	MonTech D-RPA 3000
XX	Instrument model not specified by lab		

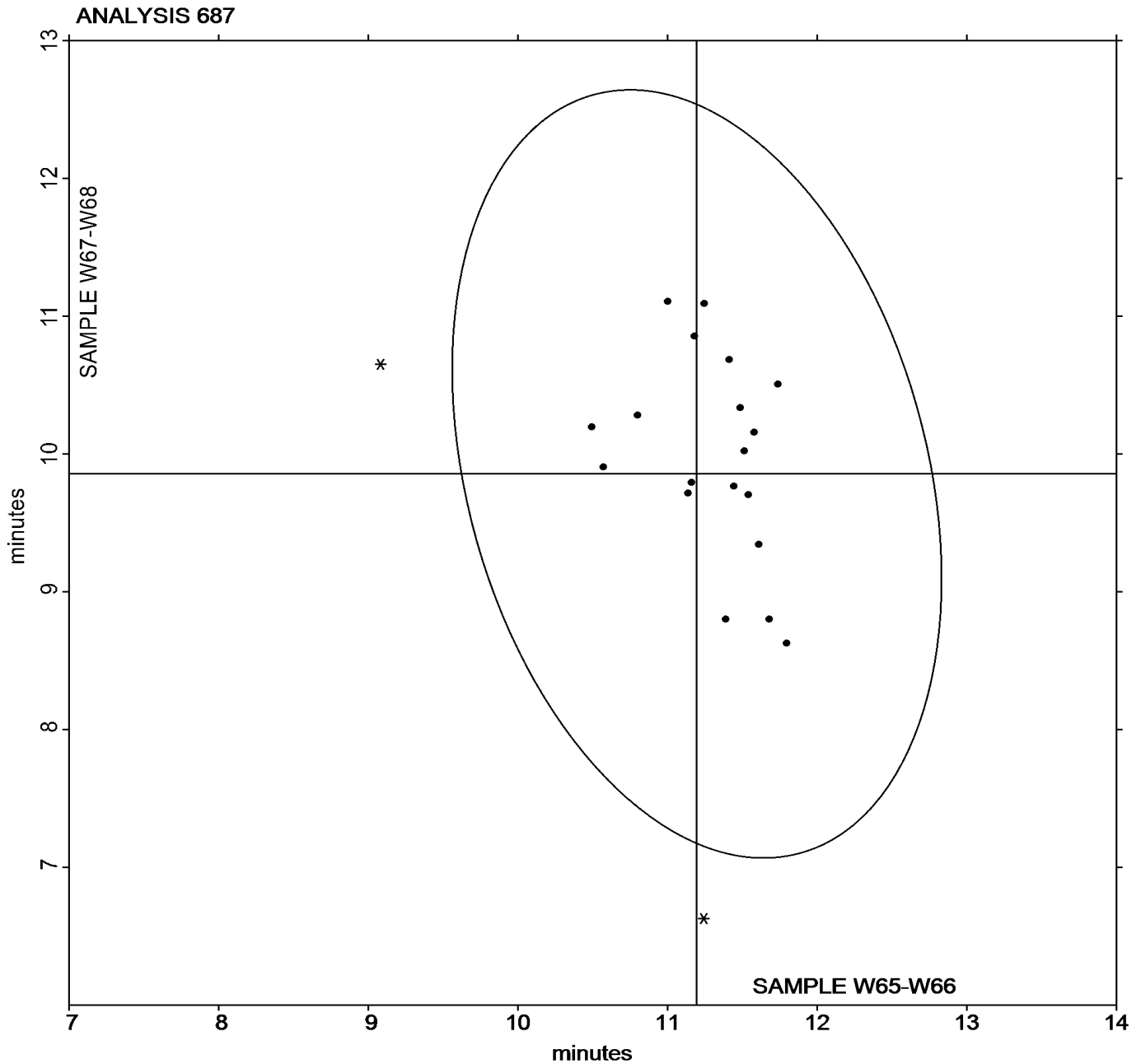


Rubber Interlaboratory Testing Program
Analysis 687
MDR Vulcanization-Cure Time 90% (minutes)

Report #227
1st Qtr 2026

Grand Mean Sample **W65-W66** = 11.196 minutes

Grand Mean Sample **W67-W68** = 9.8553 minutes





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

Report #227
1st Qtr 2026

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		1.475	-0.155	-0.77	3.350	0.107	0.42	ME
3QWGEK		1.590	-0.040	-0.20	3.287	0.044	0.17	XX
43CGVD		1.570	-0.060	-0.30	3.183	-0.060	-0.24	MC
448ZWF		1.660	0.030	0.15	3.316	0.073	0.29	MC
4DAKWM		1.642	0.012	0.06	2.987	-0.256	-1.01	MM
BZH4B9		1.704	0.074	0.37	3.319	0.076	0.30	ME
D7H3Y3		1.347	-0.283	-1.41	2.667	-0.576	-2.28	MC
DALZ8A	*	2.052	0.422	2.10	3.993	0.750	2.97	XX
EEQ3MB		1.510	-0.120	-0.60	3.127	-0.116	-0.46	MC
HCCPG6		1.538	-0.091	-0.46	3.122	-0.121	-0.48	MM
MA8QAR		1.543	-0.086	-0.43	3.192	-0.051	-0.20	MC
MJCXPR		1.420	-0.210	-1.04	3.128	-0.115	-0.45	ME
NTB6XW		1.870	0.240	1.20	3.415	0.172	0.68	XX
NXACMZ		1.433	-0.196	-0.98	3.075	-0.168	-0.66	MR
PN4RZY		1.532	-0.098	-0.49	2.962	-0.281	-1.11	MC
TZZ9TV		1.621	-0.008	-0.04	3.273	0.030	0.12	MC
V4UPHV		1.993	0.364	1.81	3.288	0.045	0.18	ME
V728GQ		2.043	0.414	2.06	3.552	0.309	1.22	MC
VJPZCT		1.655	0.025	0.13	3.275	0.032	0.13	ME
WP8TZX		1.507	-0.123	-0.61	3.348	0.105	0.42	MC
X2JFNN		1.518	-0.111	-0.55	3.243	0.000	0.00	MC

Summary Statistics	
Grand Means	1.6296 lbf.in 3.2429 lbf.in
Std Dev Btwn Labs	0.2007 lbf.in 0.2530 lbf.in
Statistics based on 21 of 21 reporting participants	

Summary Statistics in SI Units	
Grand Means	1.8412 dN.m 3.6640 dN.m
Std Dev Btwn Labs	0.2267 dN.m 0.2859 dN.m
Statistics based on 21 of 21 reporting participants	

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound



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

Report #227
1st Qtr 2026

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	MR	MonTech D-RPA 3000
XX	Instrument model not specified by lab		

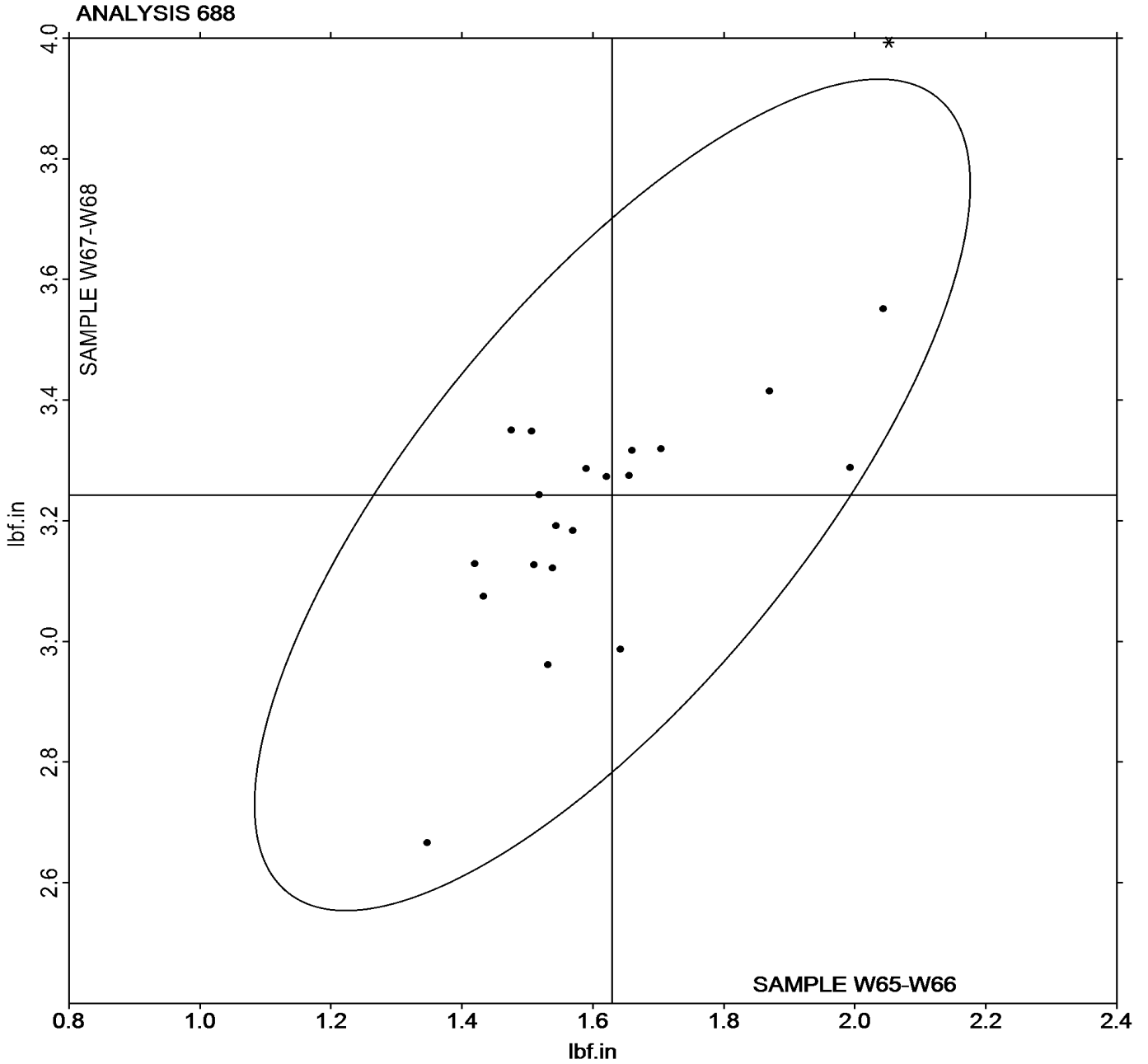


Rubber Interlaboratory Testing Program
Analysis 688
MDR Vulcanization: Minimum Torque (lbf.in)

Report #227
1st Qtr 2026

Grand Mean Sample **W65-W66** = 1.6296 lbf.in

Grand Mean Sample **W67-W68** = 3.2429 lbf.in





Rubber Interlaboratory Testing Program

Report #227

Analysis 689

1st Qtr 2026

MDR Vulcanization: Maximum Torque (lbf.in)

WebCode	Data Flag	Sample W65-W66			Sample W67-W68			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
3M2MGJ		11.86	0.39	0.60	13.64	1.48	1.82	ME
3QWGEK		12.13	0.67	1.01	11.96	-0.20	-0.25	XX
43CGVD		11.68	0.21	0.32	11.56	-0.60	-0.74	MC
448ZWF		11.59	0.13	0.19	11.54	-0.62	-0.77	MC
4DAKWM		9.91	-1.55	-2.37	10.70	-1.47	-1.81	MM
BZH4B9		11.79	0.33	0.50	12.77	0.60	0.74	ME
D7H3Y3		10.80	-0.67	-1.02	11.49	-0.67	-0.83	MC
DALZ8A		12.13	0.67	1.02	13.15	0.98	1.21	XX
EEQ3MB		10.85	-0.61	-0.93	10.88	-1.28	-1.59	MC
HCCPG6		11.75	0.28	0.43	13.69	1.53	1.89	MM
MA8QAR		11.45	-0.02	-0.03	12.33	0.16	0.20	MC
MJCXPR		10.93	-0.54	-0.82	10.97	-1.19	-1.47	ME
NTB6XW		11.96	0.49	0.75	12.93	0.77	0.95	XX
NXACMZ		10.56	-0.91	-1.39	12.30	0.13	0.16	MR
PN4RZY		11.09	-0.37	-0.57	11.97	-0.20	-0.25	MC
TZZ9TV		11.56	0.10	0.15	12.28	0.11	0.14	MC
V4UPHV		11.37	-0.10	-0.15	12.46	0.30	0.37	ME
V728GQ	*	13.01	1.54	2.35	12.31	0.14	0.17	MC
VJPZCT		11.32	-0.15	-0.22	12.05	-0.11	-0.14	ME
WP8TZX		11.80	0.33	0.51	12.32	0.16	0.19	MC
X2JFNN		11.25	-0.21	-0.33	12.17	0.00	0.01	MC

Summary Statistics	
Grand Means	11.467 lbf.in 12.166 lbf.in
Std Dev Btwn Labs	0.656 lbf.in 0.810 lbf.in
Statistics based on 21 of 21 reporting participants	

Summary Statistics in SI Units	
Grand Means	12.955 dN.m 13.746 dN.m
Std Dev Btwn Labs	0.741 dN.m 0.915 dN.m
Statistics based on 21 of 21 reporting participants	

Samples W65-W66: EPDM Compound & W67-W68: EPDM Compound



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

Report #227
1st Qtr 2026

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	ME	Alpha Tech. MDR Premiere
MM	MonTech MDR 3000	MR	MonTech D-RPA 3000
XX	Instrument model not specified by lab		

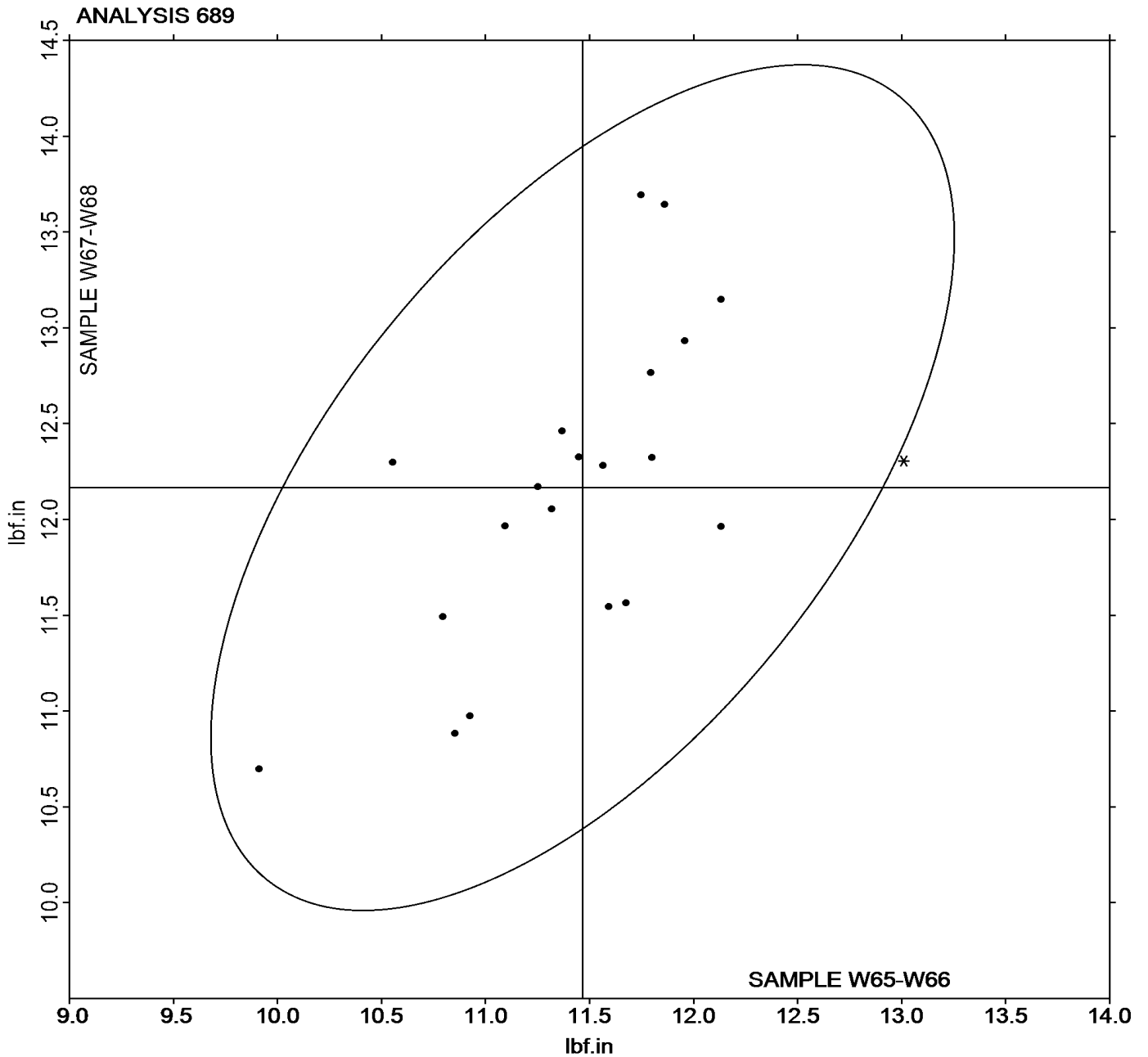


Rubber Interlaboratory Testing Program
Analysis 689
MDR Vulcanization: Maximum Torque (lbf.in)

Report #227
1st Qtr 2026

Grand Mean Sample **W65-W66** = 11.467 lbf.in

Grand Mean Sample **W67-W68** = 12.166 lbf.in





Rubber Interlaboratory Testing Program

Report #227

Analysis 690

1st Qtr 2026

RPA Rheological Properties: Part A - G' at 20Hz (kPa)

WebCode	Data Flag	Sample E61-E62			Sample E63-E64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		471.5	14.3	0.71	627.5	25.3	0.71	RP
TZZ9TV		443.0	-14.3	-0.71	577.0	-25.3	-0.71	RP

		Summary Statistics	
Grand Means		457.29 kPa	602.25 kPa
Stnd Dev Btwn Labs		20.15 kPa	35.74 kPa
Statistics based on 2 of 2 reporting participants			

Samples E61-E62: EPDM Compound & E63-E64: EPDM Compound

Key to Instrument Codes Reported by Participants

RP RPA 2000

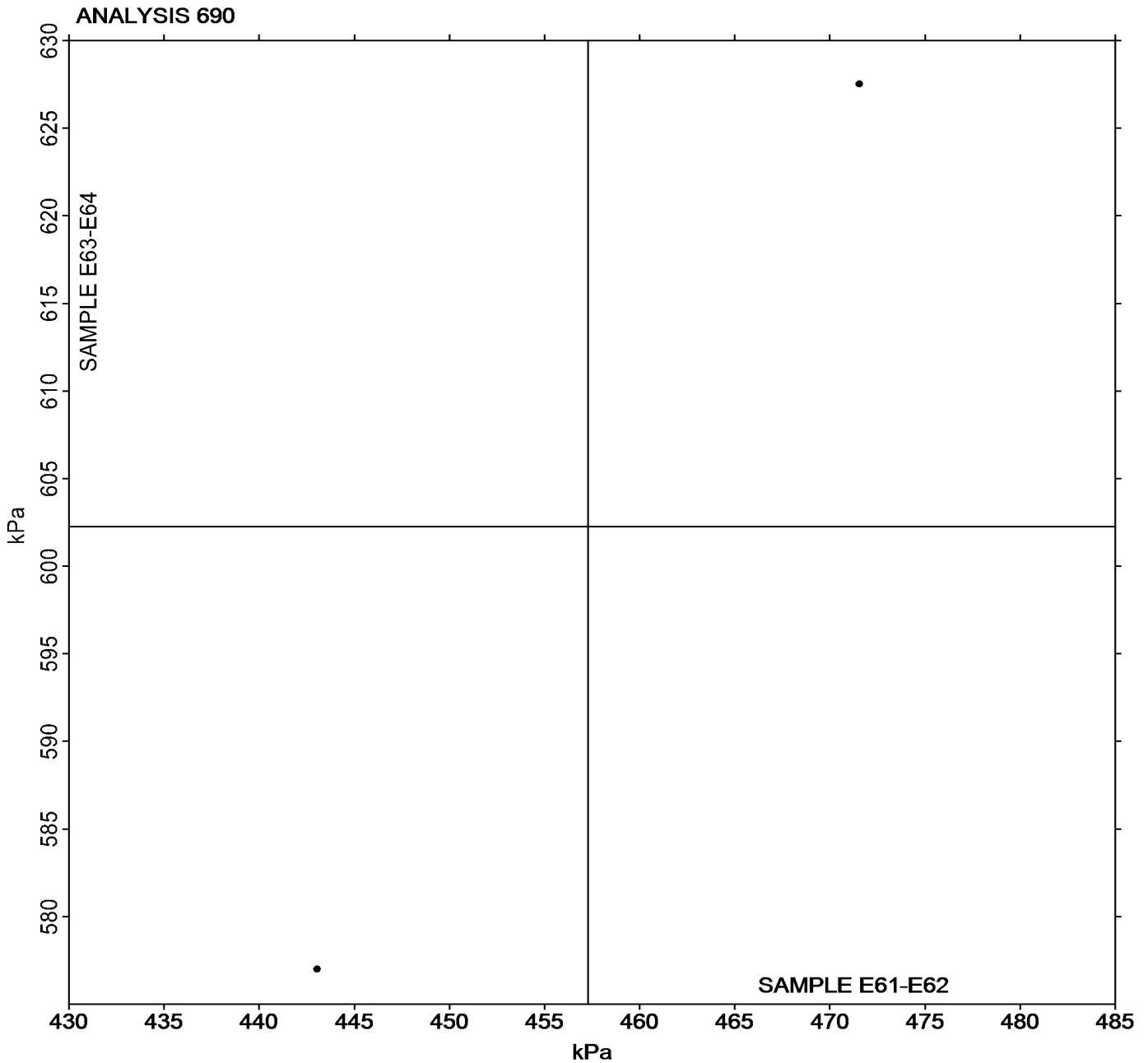


Rubber Interlaboratory Testing Program
Analysis 690
RPA Rheological Properties: Part A - G' at 20Hz (kPa)

Report #227
1st Qtr 2026

Grand Mean Sample E61-E62 = 457.29 kPa

Grand Mean Sample E63-E64 = 602.25 kPa



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 691

1st Qtr 2026

RPA Rheological Properties: Part A - G'' at 20Hz (kPa)

WebCode	Data Flag	Sample E61-E62			Sample E63-E64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		237.3	5.1	0.71	214.0	-5.9	-0.71	RP
TZZ9TV		227.2	-5.1	-0.71	225.8	5.9	0.71	RP

		Summary Statistics	
Grand Means		232.23 kPa	219.90 kPa
Std Dev Btwn Labs		7.15 kPa	8.31 kPa
		Statistics based on 2 of 2 reporting participants	

Samples E61-E62: EPDM Compound & E63-E64: EPDM Compound

Key to Instrument Codes Reported by Participants

RP RPA 2000

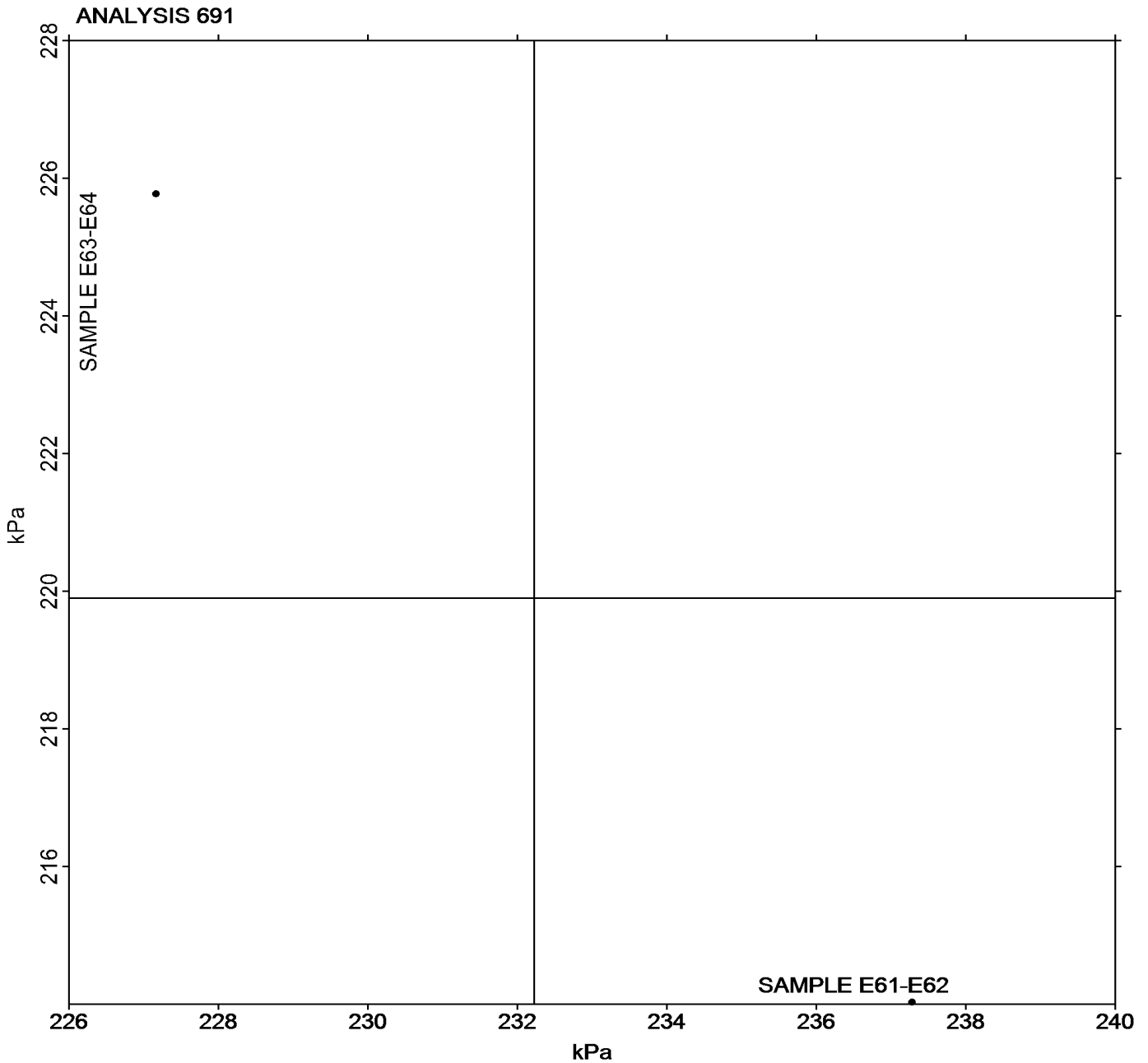


Rubber Interlaboratory Testing Program
Analysis 691
RPA Rheological Properties: Part A - G'' at 20Hz (kPa)

Report #227
1st Qtr 2026

Grand Mean Sample **E61-E62** = 232.23 kPa

Grand Mean Sample **E63-E64** = 219.90 kPa



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 695

1st Qtr 2026

RPA Rheological Properties: Part B - G' at 1.0Hz (kPa)

WebCode	Data Flag	Sample E61-E62			Sample E63-E64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		58.81	-0.11	-0.71	85.57	3.65	0.71	RP
TZZ9TV		59.03	0.11	0.71	78.28	-3.65	-0.71	RP

		Summary Statistics	
Grand Means		58.921 kPa	81.927 kPa
Std Dev Btwn Labs		0.157 kPa	5.157 kPa
Statistics based on 2 of 2 reporting participants			

Samples E61-E62: EPDM Compound & E63-E64: EPDM Compound

Key to Instrument Codes Reported by Participants

RP RPA 2000

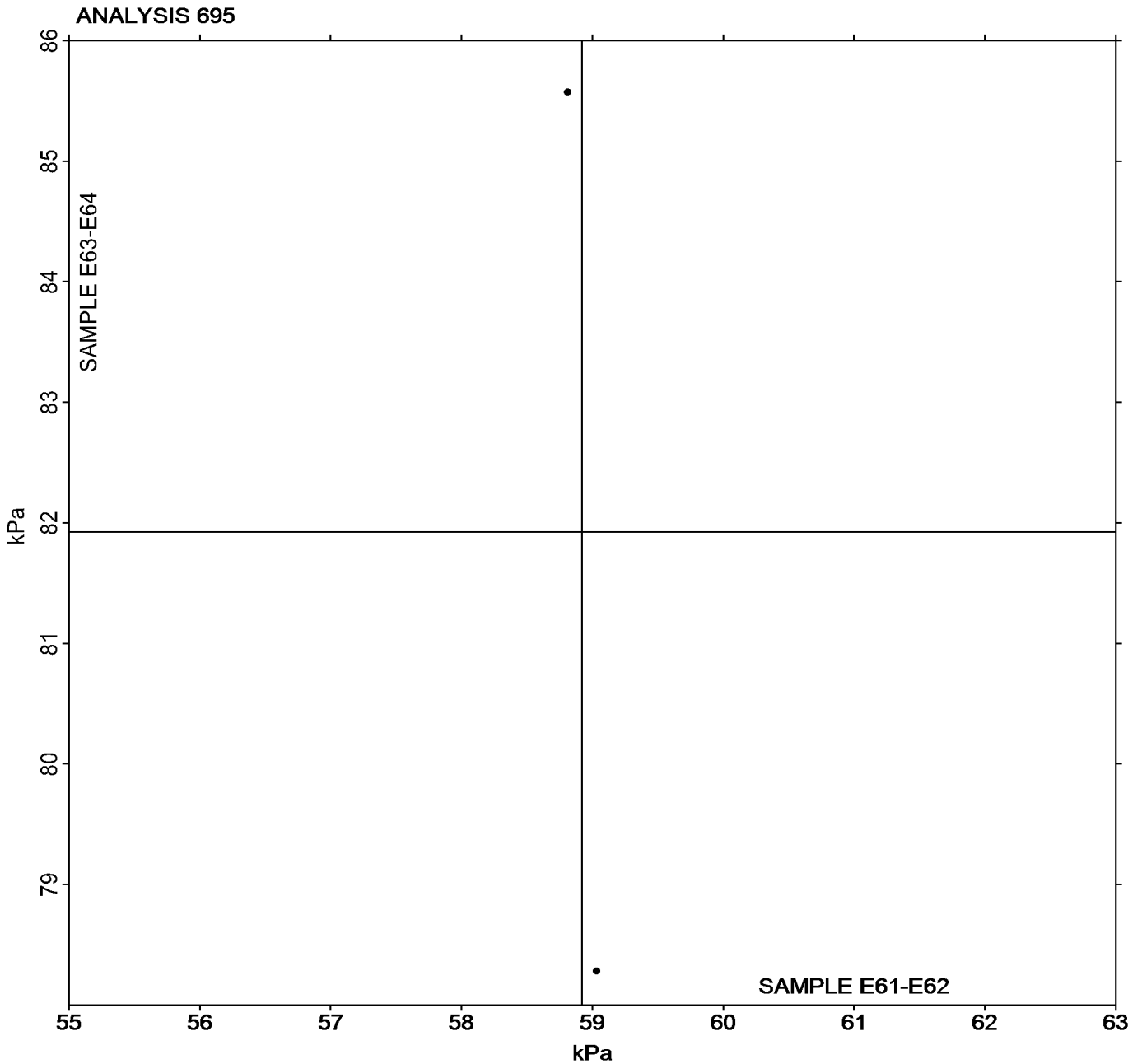


Rubber Interlaboratory Testing Program
Analysis 695
RPA Rheological Properties: Part B - G' at 1.0Hz (kPa)

Report #227
1st Qtr 2026

Grand Mean Sample **E61-E62** = 58.921 kPa

Grand Mean Sample **E63-E64** = 81.927 kPa



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Rubber Interlaboratory Testing Program

Report #227

Analysis 696

1st Qtr 2026

RPA Rheological Properties: Part B - G'' at 1.0Hz (kPa)

WebCode	Data Flag	Sample E61-E62			Sample E63-E64			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
43CGVD		75.27	1.10	0.71	92.42	1.45	0.71	RP
TZZ9TV		73.07	-1.10	-0.71	89.51	-1.45	-0.71	RP

		Summary Statistics	
Grand Means		74.168 kPa	90.965 kPa
Std Dev Btwn Labs		1.556 kPa	2.055 kPa
Statistics based on 2 of 2 reporting participants			

Samples E61-E62: EPDM Compound & E63-E64: EPDM Compound

Key to Instrument Codes Reported by Participants

RP RPA 2000



Rubber Interlaboratory Testing Program

Report #227

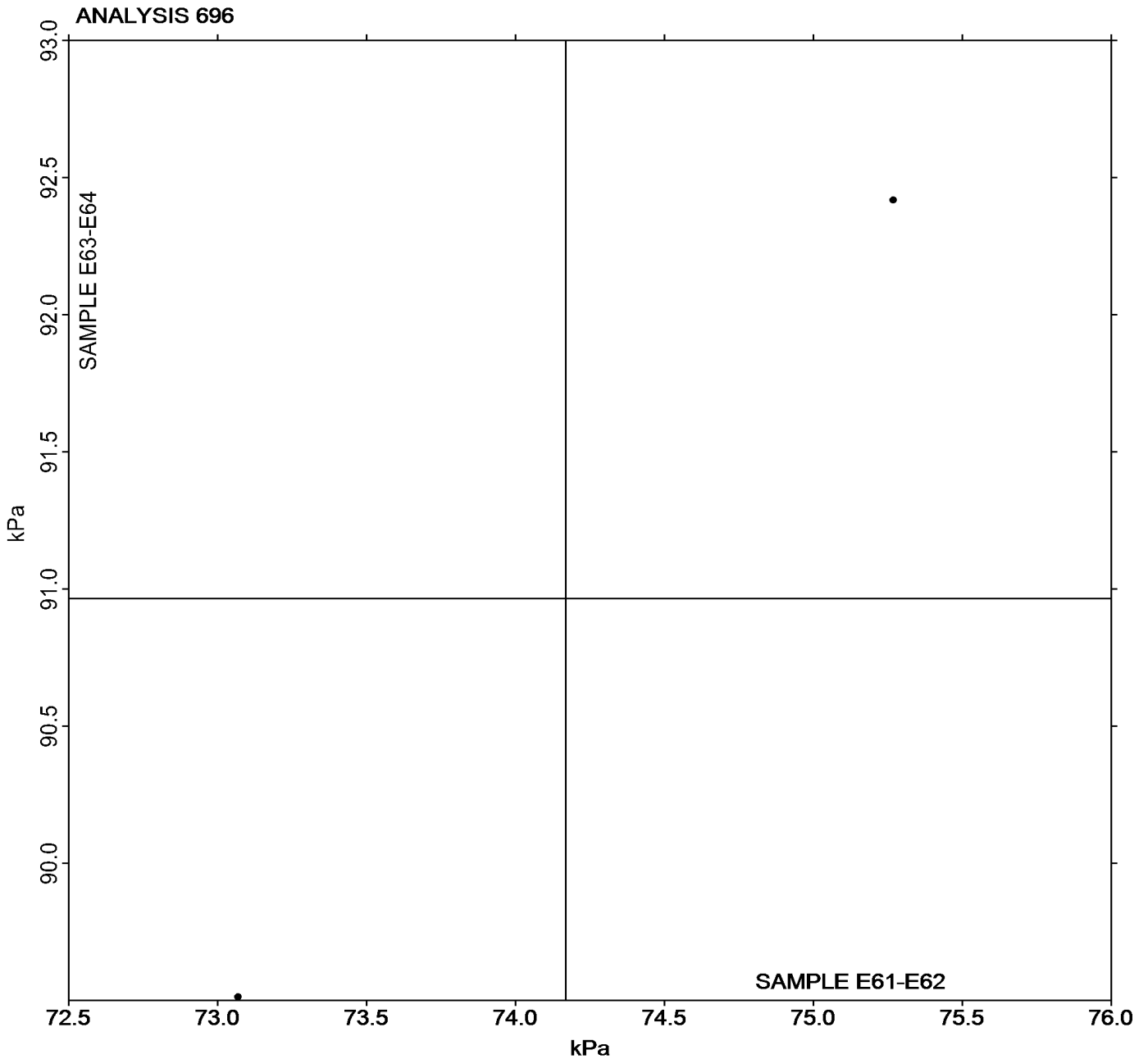
Analysis 696

1st Qtr 2026

RPA Rheological Properties: Part B - G'' at 1.0Hz (kPa)

Grand Mean Sample **E61-E62** = 74.168 kPa

Grand Mean Sample **E63-E64** = 90.965 kPa



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.

-End of Report-