Collaborative Testing Services, Inc.

Rubber Interlaboratory Testing Program

Summary Report #216- 2nd Qtr 2023

About the Rubber Program, About CTS

Key for Web Summary Report

Analysis	Analysis Name
605	Tensile Strength: Precured Rubber Samples
606	Ultimate Elongation: Precured Rubber Samples
607	Stress at 300% Elongation: Precured Samples
608	Stress at 100% Elongation: Precured Samples
620	Hardness (Type A): Precured Rubber Samples
621	Density: Precured Rubber Samples @ 25C
625	Hardness (Shore D/Type D)
630	Tensile Strength: Participant-Cured Rubber
631	Ultimate Elongation: Participant-Cured Samples
632	Tensile Stress at 300% Elongation: Lab-Cured
633	Tensile Stress at 100% Elongation: Lab-Cured
635	Compression Set
640	O-Ring Tensile Strength at Break
641	O-Ring Ultimate Elongation
642	O-Ring Stress at 100% Elongation
647	O-Ring Hardness (Shore A/Type A)
648	O-Ring Hardness (Shore M)
649	O-Ring Density
650	O-Ring Compression Set
660	Mooney Viscosity (4-minute readings)
661	Mooney Viscosity (8-minute butyl readings)
662	Mooney Stress Relaxation: t80
663	Mooney Stress Relaxation: X30
664	Mooney Stress Relaxation: Area under curve
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

Analysis	Analysis Name
689	MDR Vulcanization Charac.: Maximum Torque
690	RPA Rheological Properties: Part A - G′ at 20Hz
691	RPA Rheological Properties: Part A - G″ at 20Hz
695	RPA Rheological Properties: Part B - G′ at 1.0Hz
696	RPA Rheological Properties: Part B - G″ at 1.0Hz

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, wine, hemp, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 80 countries, currently participate in CTS programs.

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

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Key for Web Summary Report (Page 1 of 2)

WebCode — Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the Rubber Report published on the CTS Web site. The WebCode for each analysis can be found in the Performance Analysis Report mailed to each participant.

Lab Mean — Tensile & Hardness: the average of the median values obtained for each sample. All other tests: the average of the test results obtained by the participant.

Grand Mean — The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.

Difference from Grand Mean — The difference of the LAB MEAN from the GRAND MEAN.

Between-Lab Standard Deviation — An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).

Comparative Performance Value — An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa). The critical value for each CPV will vary depending on the number of labs participating in a test.

Inst Code — If instruments are tracked in a test, a code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section).

Data Flag — DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

DATA FLAG	STATISTICALLY INCLUDED/EXCLUDED	ACTION REQUIRED
*	INCLUDED	**CAUTION** - review testing procedure and monitor future results. Results fall outside 95% ellipse but within a 99% ellipse that is calculated but not drawn.
X	EXCLUDED	**STOP** - immediate review of data and/or testing procedure is required. Results fall outside the 99% ellipse. See specific notes following each table for more information on why the data is excluded.
M	EXCLUDED	**PROCEED** - lab was unable to report data for at least one sample. However, a lab receiving two of more M flags for a test may need to stop and review its testing procedures.

Graph - For each laboratory, the LAB MEAN for the first sample (x-axis) is plotted against the LAB MEAN for the second sample (y-axis) with each point representing a laboratory. The horizontal and vertical cross-hairs are the GRAND MEANS for each sample. When 20 or more laboratories are in the statistics, an ellipse is also drawn so that 95% of the time a randomly selected laboratory will be included inside the ellipse. Plotted data flags are explained above.

Common Problems Highlighted in Footnotes

1. ***Extreme data*** - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. (The data usually vary by more than three standard deviations from the grand mean.) The participant is advised to immediately review his data and/or testing procedure.

2. ***Systematic bias*** - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.

3. ***Inconsistency in testing between samples/sample sets*** - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an * that falls on the edge of the ellipse.

4. ***Inconsistency in testing within a sample*** - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.

5. ***Data appeared to be off by a factor of # and was corrected by CTS*** - In tests that involve computations, the results reported to CTS may be off by a factor. If this factor can easily be determined, CTS may correct the data and flag the participant. Occasionally CTS will correct a laboratory's results even though the data are still high or low when compared to the other participants. This is done so that the laboratory may be alerted to other possible errors in its testing procedure.

6. ***Data for two samples (or two tests) appeared to be switched by the lab, and the error was corrected by CTS.***

Labs flagged with an * are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An * should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
32WFX4	X	2,509.2	-746.9	-4.56	2,313.4	-954.0	-5.57
36T3TD		2,965.0	-291.1	-1.78	2,973.3	-294.2	-1.72
3GNUZX		3,357.7	101.6	0.62	3,393.9	126.5	0.74
3LF9JD		3,015.0	-241.1	-1.47	3,025.0	-242.4	-1.42
3T446W	*	2,875.0	-381.1	-2.33	3,115.0	-152.4	-0.89
42RDPB		3,519.0	262.9	1.61	3,468.0	200.6	1.17
46UC6A		2,943.5	-312.6	-1.91	3,082.5	-184.9	-1.08
48VFRQ		3,462.2	206.1	1.26	3,405.6	138.2	0.81
4GYWMW		3,296.0	39.9	0.24	3,167.6	-99.9	-0.58
4KJ7BN		3,074.8	-181.3	-1.11	3,082.1	-185.3	-1.08
4KKGBH		3,363.0	106.9	0.65	3,301.5	34.1	0.20
6LUJWG		3,430.0	174.0	1.06	3,391.4	124.0	0.72
6QN6KT		3,042.2	-213.9	-1.31	2,992.2	-275.3	-1.61
6TDB6P		3,520.0	263.9	1.61	3,435.0	167.6	0.98
74T2JR		3,359.0	102.9	0.63	3,567.0	299.6	1.75
7FKMPL		3,346.5	90.4	0.55	3,323.5	56.1	0.33
7J43V8		3,334.5	78.4	0.48	3,494.5	227.1	1.33
8MZVKW		3,144.5	-111.6	-0.68	3,201.5	-65.9	-0.39
8XB22C		3,357.7	101.6	0.62	3,328.6	61.2	0.36
9L6KBE		3,120.0	-136.1	-0.83	3,220.0	-47.4	-0.28
9LWPG8		3,456.5	200.4	1.22	3,359.5	92.1	0.54
9VLVGE		3,281.9	25.8	0.16	3,398.7	131.3	0.77
9XX939		3,149.5	-106.6	-0.65	3,156.0	-111.4	-0.65
9ZMFM6		3,300.5	44.4	0.27	3,365.5	98.1	0.57
ATUF7A		3,561.0	304.9	1.86	3,445.5	178.1	1.04
AZHEZA		3,280.1	24.0	0.15	3,342.4	75.0	0.44
B4RU6R		3,336.2	80.1	0.49	3,372.9	105.5	0.62
B4U9CF		3,378.0	121.9	0.74	3,480.5	213.1	1.24
BKFR6G		3,178.5	-77.5	-0.47	3,242.3	-25.1	-0.15
BQ6ALD		3,212.6	-43.5	-0.27	3,060.3	-207.1	-1.21
BWXPBQ		3,100.9	-155.1	-0.95	3,161.9	-105.6	-0.62
C2JN47		3,337.0	80.9	0.49	3,273.5	6.1	0.04
C97RCE		3,044.0	-212.1	-1.30	2,920.0	-347.4	-2.03
C9GF79		3,220.6	-35.5	-0.22	3,224.2	-43.2	-0.25
DJT862		3,097.5	-158.6	-0.97	3,238.5	-28.9	-0.17
E398Y9	X	2,720.2	-535.9	-3.27	2,479.1	-788.3	-4.60
EWH32Y		3,221.0	-35.1	-0.21	3,131.5	-135.9	-0.79
EX8MV4		3,354.0	97.9	0.60	3,448.5	181.1	1.06

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
EY89LV		3,038.6	-217.5	-1.33	3,089.3	-178.1	-1.04
FHEHZF		3,156.0	-100.0	-0.61	3,113.3	-154.2	-0.90
GG3E8U		3,295.0	38.9	0.24	3,305.0	37.6	0.22
GWVB6J		3,554.5	298.4	1.82	3,584.0	316.6	1.85
H3WHNT		3,314.0	57.9	0.35	3,457.5	190.1	1.11
H9KV62		3,035.5	-220.6	-1.35	3,232.9	-34.5	-0.20
HEUJ64		3,562.9	306.9	1.87	3,497.8	230.3	1.35
HKEL7E		3,290.0	33.9	0.21	3,230.0	-37.4	-0.22
JGEW3C		3,137.0	-119.1	-0.73	3,244.0	-23.4	-0.14
KCBM3U		3,338.7	82.7	0.51	3,419.0	151.6	0.89
KWX83J		3,410.5	154.4	0.94	3,188.5	-78.9	-0.46
KXFWQ7		3,236.1	-20.0	-0.12	3,185.7	-81.7	-0.48
LBUA2X		3,338.1	82.0	0.50	3,340.2	72.8	0.42
LF7U4H		3,305.4	49.4	0.30	3,450.5	183.1	1.07
LGHV7Y		3,271.7	15.6	0.10	3,167.2	-100.2	-0.59
LHZFYU		3,176.4	-79.7	-0.49	3,161.9	-105.6	-0.62
LKH2RV	*	3,435.0	178.9	1.09	3,175.0	-92.4	-0.54
LKPMJQ		3,347.5	91.4	0.56	3,458.0	190.6	1.11
LPJJ7W		3,220.0	-36.1	-0.22	3,313.5	46.1	0.27
MFM87K		3,223.5	-32.6	-0.20	3,380.9	113.4	0.66
MU63FP		3,472.5	216.4	1.32	3,344.0	76.6	0.45
NU2EG7		3,305.5	49.4	0.30	3,460.0	192.6	1.12
P8P2LH		3,273.6	17.5	0.11	3,220.2	-47.3	-0.28
PA9FPJ		3,103.8	-152.2	-0.93	3,074.8	-192.6	-1.12
PFVHX4	*	2,795.0	-461.1	-2.82	2,762.5	-504.9	-2.95
QUVZMM		3,066.0	-190.1	-1.16	2,895.5	-371.9	-2.17
R68RLG		3,186.0	-70.1	-0.43	3,229.0	-38.4	-0.22
RNFTZU		3,319.3	63.2	0.39	3,374.5	107.1	0.63
RXR4VL		3,048.5	-207.6	-1.27	3,087.0	-180.4	-1.05
TQ6VKU		3,120.8	-135.3	-0.83	3,139.2	-128.2	-0.75
U7TXGJ		3,137.2	-118.9	-0.73	3,042.2	-225.2	-1.32
UHTU6K		3,359.9	103.8	0.63	3,426.2	158.8	0.93
URGUF3		3,461.4	205.3	1.25	3,456.3	188.9	1.10
V2TADG		3,265.6	9.5	0.06	3,373.6	106.2	0.62
VBMNKE		3,361.5	105.4	0.64	3,410.5	143.1	0.84
VDRXDQ		3,116.5	-139.6	-0.85	3,090.1	-177.3	-1.04
VPKX8K		3,312.0	55.9	0.34	3,343.0	75.6	0.44

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample B33-B34 Lab Mean	Sample B33-B34 Diff from Grand Mean	Sample B33-B34 CPV
W799UM		3,082.1	-174.0	-1.06	2,973.3	-294.1	-1.72
XQRT7H		3,559.5	303.4	1.85	3,457.5	190.1	1.11
Y2ZM9F		3,293.0	36.9	0.23	3,406.5	139.1	0.81
YDK23N		3,146.8	-109.3	-0.67	3,181.6	-85.8	-0.50
YKH3U2		3,470.0	213.9	1.31	3,405.0	137.6	0.80
Z633WB		3,271.4	15.3	0.09	3,453.4	186.0	1.09
ZM3AQ4		3,416.1	160.0	0.98	3,470.7	203.3	1.19
ZRVAA6		3,169.1	-87.0	-0.53	3,169.1	-98.3	-0.57
ZVWEK6		3,163.8	-92.3	-0.56	3,098.6	-168.8	-0.99

Summary Statistics

	Sample B31-B32	Sample B33-B34
Grand Means	3,256.08 psi	3,267.42 psi
Stnd Dev Btwn Labs	163.68 psi	171.20 psi

Statistics based on 82 of 84 reporting participants

Summary Statistics in SI Units

	Sample B31-B32	Sample B33-B34
Grand Means	22.450 MPa	22.530 MPa
Stnd Dev Btwn Labs	1.129 MPa	1.180 MPa

Statistics based on 82 of 84 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

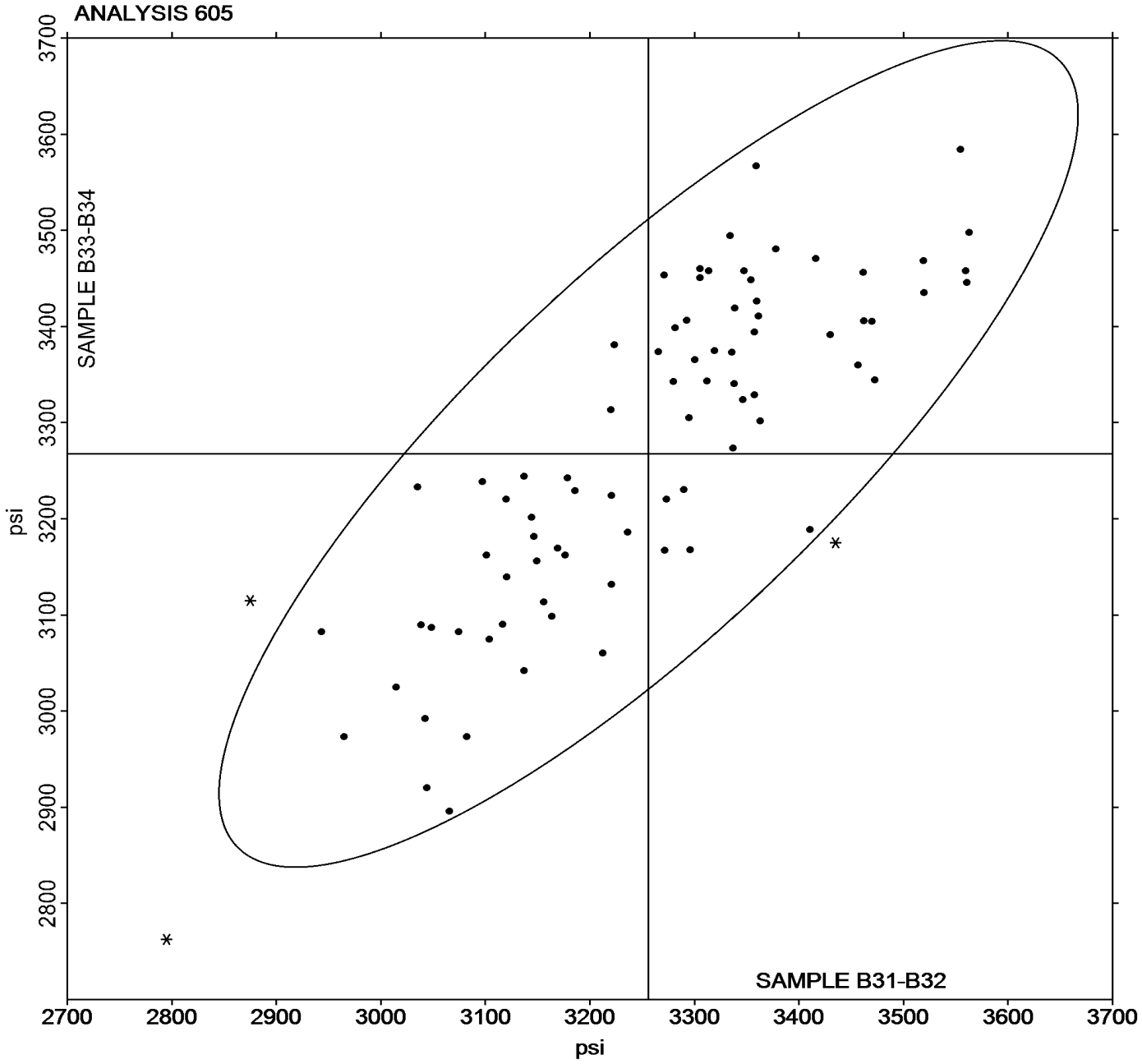
Comments on Assigned Data Flags for Test #605

32WFX4 (X) - Data for all samples are low. Possible Systematic Error.

E398Y9 (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B33-B34.

Grand Mean Sample **B31-B32** = 3,256.08 psi

Grand Mean Sample **B33-B34** = 3,267.42 psi



WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
32WFX4	*	634.0	23.6	0.88	588.0	-25.6	-0.99
36T3TD		558.5	-51.9	-1.95	555.8	-57.8	-2.25
3LF9JD	X	520.5	-89.9	-3.37	514.0	-99.6	-3.87
3T446W	*	552.5	-57.9	-2.17	591.0	-22.6	-0.88
42RDPB		578.0	-32.4	-1.22	594.5	-19.1	-0.74
46UC6A		587.5	-22.9	-0.86	618.5	4.9	0.19
48VFRQ		632.5	22.1	0.83	644.2	30.6	1.19
4GYWMW		619.3	8.8	0.33	608.6	-5.0	-0.19
4KJ7BN		586.0	-24.4	-0.92	606.0	-7.6	-0.29
4KKGBH		619.5	9.1	0.34	610.5	-3.1	-0.12
6LUJWG		644.2	33.8	1.27	641.7	28.2	1.09
6QN6KT		600.0	-10.4	-0.39	604.5	-9.1	-0.35
6TDB6P		602.0	-8.4	-0.32	611.0	-2.6	-0.10
74T2JR		643.0	32.6	1.22	649.0	35.4	1.38
7FKMPL		638.5	28.1	1.05	642.5	28.9	1.12
7J43V8		605.0	-5.4	-0.20	610.5	-3.1	-0.12
8MZVKW		668.5	58.1	2.18	662.5	48.9	1.90
8XB22C		620.0	9.6	0.36	630.0	16.4	0.64
9L6KBE		590.0	-20.4	-0.77	610.0	-3.6	-0.14
9LWPG8		615.5	5.1	0.19	606.0	-7.6	-0.29
9VLVGE		600.0	-10.4	-0.39	607.1	-6.5	-0.25
9XX939		601.6	-8.8	-0.33	613.8	0.2	0.01
9ZMFM6		608.0	-2.4	-0.09	621.5	7.9	0.31
ATUF7A		610.5	0.1	0.00	639.0	25.4	0.99
AZHEZA		563.5	-46.9	-1.76	600.5	-13.1	-0.51
B4RU6R		563.9	-46.6	-1.75	560.8	-52.7	-2.05
B4U9CF		622.5	12.1	0.45	594.0	-19.6	-0.76
BKFR6G		642.5	32.1	1.20	633.0	19.4	0.75
BQ6ALD		607.5	-2.9	-0.11	604.5	-9.1	-0.35
BWXPBQ		607.0	-3.4	-0.13	606.0	-7.6	-0.29
C2JN47		625.5	15.1	0.57	630.5	16.9	0.66
C97RCE	X	595.5	-14.9	-0.56	536.5	-77.1	-3.00
C9GF79		649.0	38.6	1.45	643.5	29.9	1.16
DJT862		610.0	-0.4	-0.02	614.5	0.9	0.04
E398Y9	X	718.6	108.1	4.06	993.5	379.9	14.77
EWH32Y		580.5	-29.9	-1.12	581.0	-32.6	-1.27
EX8MV4	X	585.0	-25.4	-0.95	544.5	-69.1	-2.69
EY89LV		584.0	-26.4	-0.99	601.0	-12.6	-0.49

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
GG3E8U		610.0	-0.4	-0.02	598.5	-15.1	-0.59
GWVB6J		639.0	28.6	1.07	650.5	36.9	1.44
H3WHNT		630.5	20.1	0.75	639.0	25.4	0.99
H9KV62		594.0	-16.4	-0.62	614.5	0.9	0.04
HEUJ64		629.5	19.1	0.72	628.5	14.9	0.58
HKEL7E		590.5	-19.9	-0.75	593.0	-20.6	-0.80
JGEW3C		604.5	-5.9	-0.22	607.5	-6.1	-0.24
KCBM3U		650.5	40.1	1.50	655.0	41.4	1.61
KWX83J		615.5	5.1	0.19	605.5	-8.1	-0.31
KXFWQ7		622.8	12.3	0.46	612.8	-0.7	-0.03
LBUA2X		572.0	-38.4	-1.44	585.8	-27.8	-1.08
LF7U4H	X	712.5	102.0	3.83	702.5	88.9	3.45
LGHV7Y		593.4	-17.0	-0.64	602.7	-10.9	-0.42
LHZFYU		627.4	17.0	0.64	625.6	12.0	0.47
LKH2RV	X	766.5	156.1	5.85	729.0	115.4	4.49
LKPMJQ		609.0	-1.4	-0.05	634.0	20.4	0.79
LPJJ7W	*	661.5	51.1	1.92	689.5	75.9	2.95
MFM87K		613.5	3.1	0.12	610.0	-3.6	-0.14
MU63FP		600.0	-10.4	-0.39	601.0	-12.6	-0.49
NU2EG7		629.5	19.1	0.72	635.0	21.4	0.83
P8P2LH		620.3	9.9	0.37	600.1	-13.5	-0.52
PA9FPJ		615.3	4.8	0.18	608.6	-5.0	-0.20
PFVHX4		657.0	46.6	1.75	649.3	35.7	1.39
QUVZMM		598.0	-12.4	-0.47	635.0	21.4	0.83
R68RLG		615.5	5.1	0.19	619.5	5.9	0.23
RNFTZU		577.0	-33.4	-1.25	569.5	-44.1	-1.71
RXR4VL		580.0	-30.4	-1.14	576.5	-37.1	-1.44
TQ6VKU		622.5	12.1	0.45	621.5	7.9	0.31
U7TXGJ		643.0	32.6	1.22	634.0	20.4	0.79
UHTU6K		659.9	49.4	1.85	641.7	28.2	1.09
URGUF3		611.5	1.1	0.04	611.5	-2.1	-0.08
V2TADG	*	577.6	-32.8	-1.23	624.2	10.6	0.41
VBMNKE		652.0	41.6	1.56	637.0	23.4	0.91
VDRXDQ		621.5	11.1	0.42	639.3	25.7	1.00
VPKX8K		589.0	-21.4	-0.80	588.0	-25.6	-0.99
W799UM		559.0	-51.4	-1.93	551.5	-62.1	-2.41
XQRT7H		612.5	2.1	0.08	589.5	-24.1	-0.94

Rubber Interlaboratory Testing Program

Analysis 606

Ultimate Elongation (percent)

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample B33-B34 Lab Mean	Sample B33-B34 Diff from Grand Mean	Sample B33-B34 CPV
Y2ZM9F	X	603.5	-6.9	-0.26	691.5	77.9	3.03
YDK23N		600.1	-10.4	-0.39	586.0	-27.6	-1.07
YKH3U2		623.0	12.6	0.47	636.0	22.4	0.87
Z633WB		605.5	-4.9	-0.18	617.0	3.4	0.13
ZM3AQ4		610.8	0.4	0.02	591.4	-22.1	-0.86
ZRVAA6		614.2	3.7	0.14	609.3	-4.3	-0.17
ZVWEK6		553.3	-57.2	-2.14	558.7	-54.8	-2.13

Summary Statistics

	Sample B31-B32	Sample B33-B34
Grand Means	610.42 percent	613.58 percent
Stnd Dev Btwn Labs	26.66 percent	25.72 percent

Statistics based on 75 of 82 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #606

3LF9JD (X) - Data for all samples are low. Possible Systematic Error.

C97RCE (X) - Data for sample group B33-B34 are low.

E398Y9 (X) - Extreme Data.

EX8MV4 (X) - Inconsistent in testing between samples.

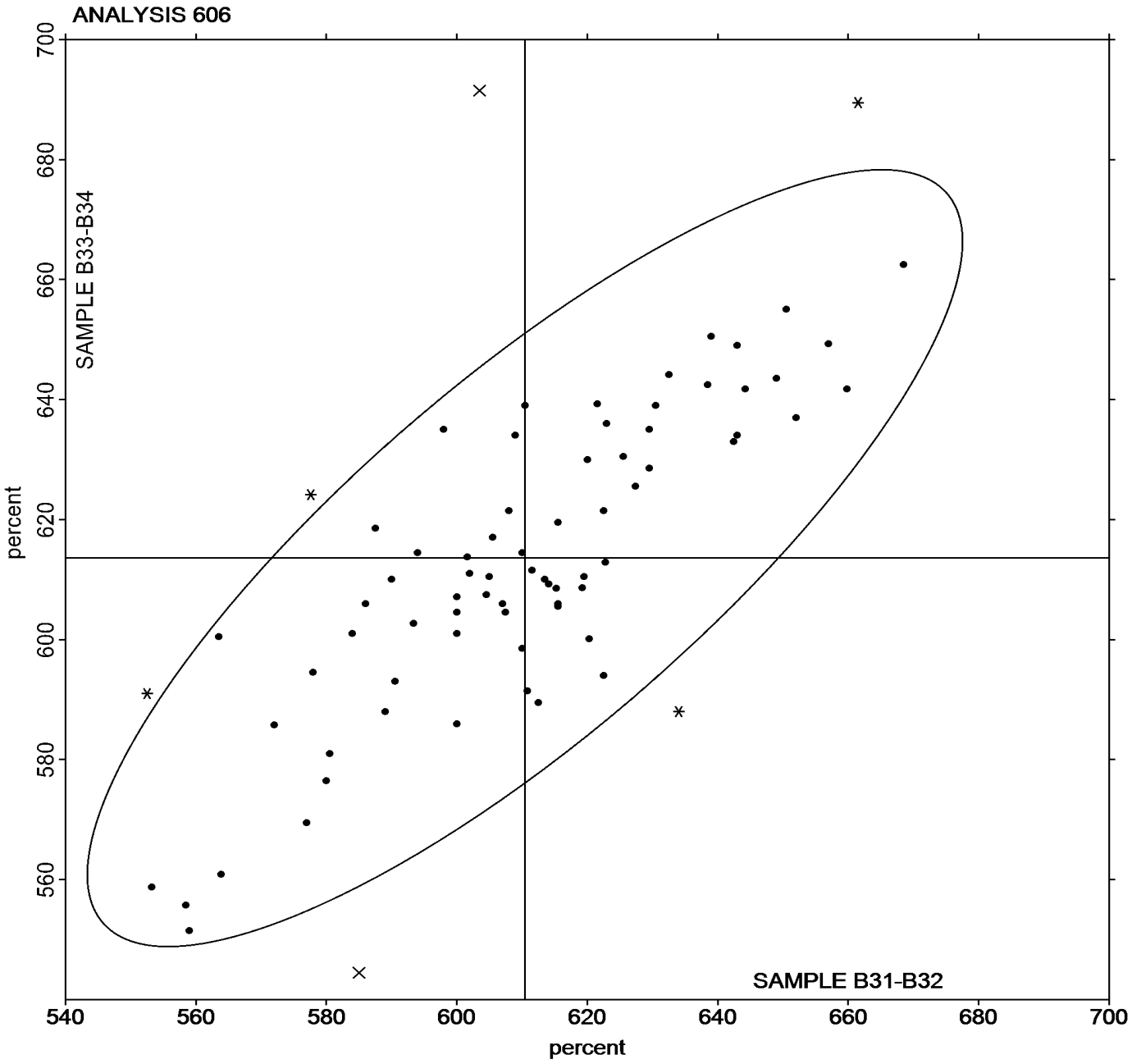
LF7U4H (X) - Data for all samples are high. Possible Systematic Error. Inconsistent within the determinations of sample group B31-B32.

LKH2RV (X) - Data for all samples are high. Possible Systematic Error.

Y2ZM9F (X) - Data for sample group B33-B34 are high. Inconsistent within the determinations of sample group B33-B34.

Grand Mean Sample **B31-B32** = 610.42 percent

Grand Mean Sample **B33-B34** = 613.58 percent



WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
32WFX4		787.6	-176.1	-2.47	858.6	-107.0	-1.67
36T3TD		1,035.5	71.8	1.01	1,004.8	39.1	0.61
3LF9JD	X	1,145.0	181.3	2.54	1,230.0	264.3	4.13
3T446W		948.0	-15.7	-0.22	974.5	8.8	0.14
42RDPB		1,044.0	80.3	1.12	1,019.5	53.8	0.84
46UC6A		914.5	-49.2	-0.69	881.5	-84.2	-1.31
48VFRQ		965.7	2.0	0.03	923.4	-42.3	-0.66
4GYWMW		961.9	-1.8	-0.03	999.4	33.7	0.53
4KJ7BN		973.2	9.5	0.13	966.0	0.3	0.00
4KKGBH		1,072.0	108.3	1.52	1,022.5	56.8	0.89
6LUJWG		905.5	-58.2	-0.82	892.8	-72.9	-1.14
6QN6KT		916.6	-47.1	-0.66	855.7	-109.9	-1.72
6TDB6P		1,017.0	53.3	0.75	1,021.5	55.8	0.87
74T2JR		896.0	-67.7	-0.95	947.5	-18.2	-0.28
7FKMPL		935.0	-28.7	-0.40	924.0	-41.7	-0.65
7J43V8		1,036.0	72.3	1.01	1,031.0	65.3	1.02
8MZVKW		822.0	-141.7	-1.98	868.5	-97.2	-1.52
8XB22C		1,034.9	71.2	1.00	987.0	21.3	0.33
9L6KBE		1,006.5	42.8	0.60	969.0	3.3	0.05
9LWPG8		971.0	7.3	0.10	997.5	31.8	0.50
9VLVGE		891.9	-71.8	-1.01	937.9	-27.7	-0.43
9XX939		911.2	-52.5	-0.74	908.5	-57.2	-0.89
9ZMFM6		958.5	-5.2	-0.07	914.5	-51.2	-0.80
ATUF7A		1,097.5	133.8	1.87	1,023.5	57.8	0.90
AZHEZA		960.2	-3.5	-0.05	906.5	-59.2	-0.92
B4RU6R	X	1,287.5	323.8	4.54	1,277.9	312.3	4.88
B4U9CF	*	975.2	11.5	0.16	1,115.3	149.6	2.34
BKFR6G		881.8	-81.9	-1.15	930.4	-35.2	-0.55
BQ6ALD		973.2	9.5	0.13	963.1	-2.6	-0.04
BWXPBQ		907.2	-56.5	-0.79	952.9	-12.8	-0.20
C2JN47		979.0	15.3	0.21	906.1	-59.6	-0.93
C97RCE		932.5	-31.2	-0.44	1,044.0	78.3	1.22
C9GF79		866.6	-97.1	-1.36	873.1	-92.5	-1.45
DJT862		925.0	-38.7	-0.54	1,041.0	75.3	1.18
E398Y9	X	778.8	-184.9	-2.59	405.2	-560.5	-8.75
EWH32Y		1,019.5	55.8	0.78	1,031.5	65.8	1.03
EX8MV4	X	1,124.5	160.8	2.25	1,292.5	326.8	5.10
EY89LV		984.8	21.1	0.30	969.6	3.9	0.06

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
GG3E8U		1,026.5	62.8	0.88	969.5	3.8	0.06
GWVB6J		999.0	35.3	0.49	928.5	-37.2	-0.58
H3WHNT		936.5	-27.2	-0.38	990.5	24.8	0.39
H9KV62		949.8	-13.9	-0.19	940.2	-25.5	-0.40
HEUJ64		1,010.5	46.8	0.66	981.5	15.8	0.25
HKEL7E		1,040.0	76.3	1.07	997.5	31.8	0.50
JGEW3C		882.0	-81.7	-1.14	906.5	-59.2	-0.92
KCBM3U		858.9	-104.8	-1.47	951.2	-14.4	-0.23
KWX83J		1,016.0	52.3	0.73	903.0	-62.7	-0.98
KXFWQ7		973.8	10.1	0.14	950.7	-15.0	-0.23
LBUA2X		1,081.4	117.7	1.65	1,018.8	53.1	0.83
LF7U4H	X	597.6	-366.1	-5.13	672.3	-293.4	-4.58
LGHV7Y		1,061.9	98.1	1.37	1,021.9	56.2	0.88
LHZFYU		929.0	-34.7	-0.49	926.8	-38.9	-0.61
LKH2RV	X	582.0	-381.7	-5.35	735.4	-230.3	-3.60
LKPMJQ		991.0	27.3	0.38	987.0	21.3	0.33
LPJJ7W		848.0	-115.7	-1.62	828.0	-137.7	-2.15
MFM87K		979.0	15.3	0.21	984.1	18.4	0.29
MU63FP		1,061.0	97.3	1.36	977.5	11.8	0.18
NU2EG7		920.5	-43.2	-0.61	1,012.5	46.8	0.73
P8P2LH		942.0	-21.7	-0.30	984.2	18.6	0.29
PA9FPJ		871.0	-92.7	-1.30	881.1	-84.6	-1.32
PFVHX4	*	763.0	-200.7	-2.81	780.0	-185.6	-2.90
R68RLG		947.5	-16.2	-0.23	918.5	-47.2	-0.74
RNFTZU		975.8	12.0	0.17	1,014.0	48.3	0.75
TQ6VKU		906.2	-57.5	-0.81	912.0	-53.7	-0.84
U7TXGJ		861.5	-102.2	-1.43	862.3	-103.4	-1.62
UHTU6K		925.2	-38.5	-0.54	1,037.0	71.3	1.11
URGUF3		1,067.5	103.8	1.45	1,032.7	67.0	1.05
V2TADG	X	1,058.1	94.4	1.32	879.7	-86.0	-1.34
VBMNKE		936.5	-27.2	-0.38	973.0	7.3	0.11
VDRXDQ		994.9	31.2	0.44	991.5	25.9	0.40
W799UM		1,034.9	71.2	1.00	1,025.4	59.8	0.93
XQRT7H		1,045.0	81.3	1.14	1,081.5	115.8	1.81
Y2ZM9F		1,027.5	63.8	0.89	977.5	11.8	0.18
YDK23N		975.2	11.4	0.16	1,038.5	72.8	1.14
YKH3U2		1,055.0	91.3	1.28	972.0	6.3	0.10

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample B33-B34 Lab Mean	Sample B33-B34 Diff from Grand Mean	Sample B33-B34 CPV
Z633WB		1,018.9	55.2	0.77	1,010.2	44.5	0.70
ZM3AQ4		997.9	34.2	0.48	1,083.8	118.1	1.84
ZRVAA6		897.8	-65.9	-0.92	958.0	-7.7	-0.12
ZVWEK6		1,071.8	108.1	1.51	1,057.2	91.5	1.43

Summary Statistics

	Sample B31-B32	Sample B33-B34
Grand Means	963.70 psi	965.67 psi
Stnd Dev Btwn Labs	71.39 psi	64.03 psi

Statistics based on 72 of 79 reporting participants

Summary Statistics in SI Units

	Sample B31-B32	Sample B33-B34
Grand Means	6.6444 MPa	6.6600 MPa
Stnd Dev Btwn Labs	0.4922 MPa	0.4400 MPa

Statistics based on 72 of 79 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #607

3LF9JD (X) - Data for sample group B33-B34 are high.

B4RU6R (X) - Data for all samples are high.

E398Y9 (X) - Data for sample group B33-B34 are low.

EX8MV4 (X) - Data for sample group B33-B34 are high. Inconsistent within the determinations of sample group B31-B32.

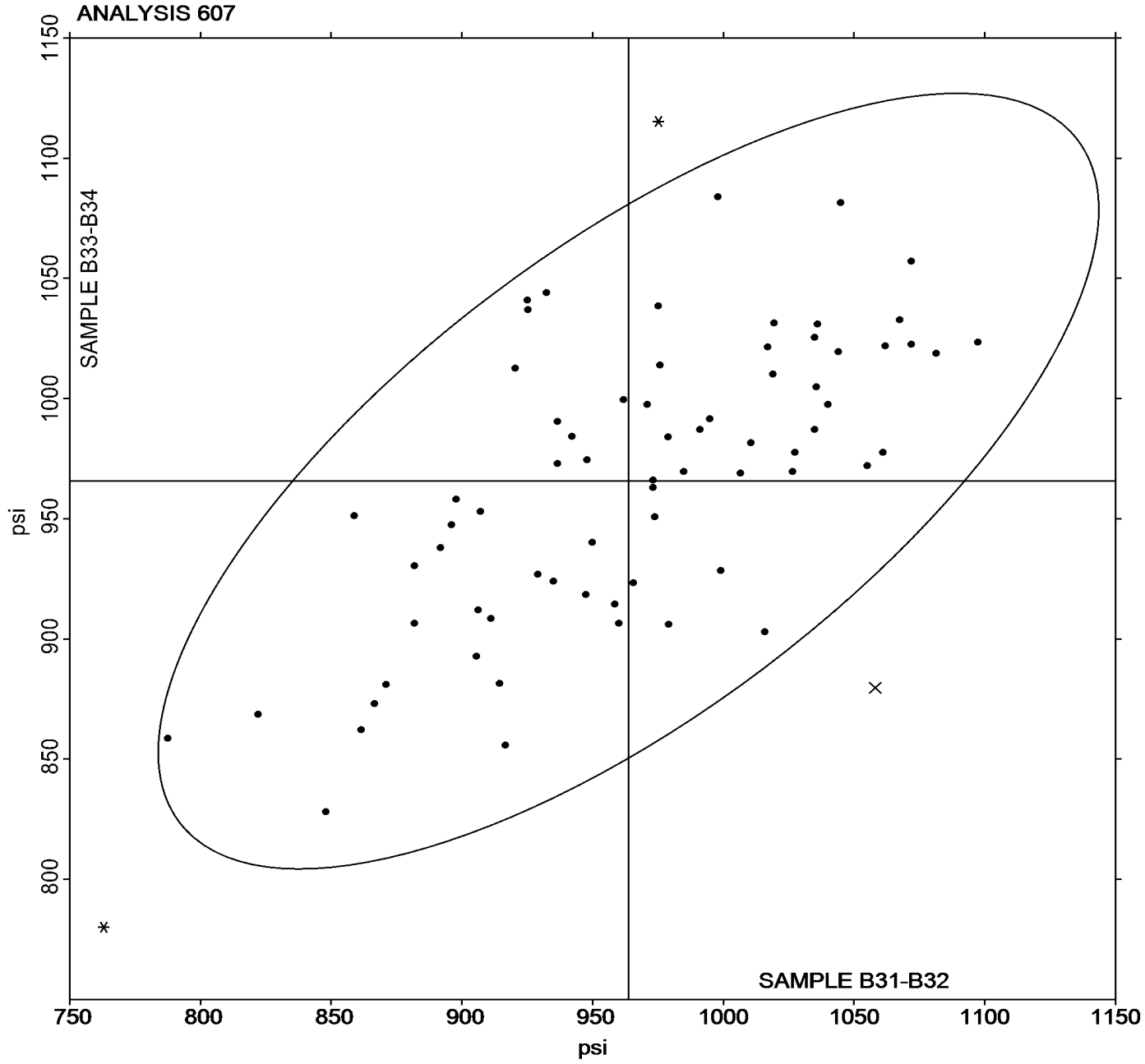
LF7U4H (X) - Data for all samples are low. Inconsistent within the determinations of sample group B31-B32.

LKH2RV (X) - Data for all samples are low. Inconsistent within the determinations of sample group B31-B32.

V2TADG (X) - Inconsistent in testing between samples.

Grand Mean Sample **B31-B32** = 963.70 psi

Grand Mean Sample **B33-B34** = 965.67 psi



WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
32WFX4		195.8	-13.0	-0.83	204.5	-5.0	-0.41
36T3TD		214.5	5.7	0.36	202.8	-6.7	-0.55
3LF9JD	X	229.0	20.2	1.29	248.0	38.5	3.16
3T446W		196.0	-12.8	-0.81	201.5	-8.0	-0.65
42RDPB		213.0	4.2	0.27	213.5	4.0	0.33
46UC6A		203.0	-5.8	-0.37	193.0	-16.5	-1.35
48VFRQ		216.2	7.4	0.47	209.2	-0.3	-0.02
4GYWMW		199.7	-9.1	-0.58	210.8	1.4	0.11
4KJ7BN		224.8	16.0	1.02	217.6	8.1	0.66
4KKGBH		229.5	20.7	1.32	221.5	12.0	0.99
6LUJWG		199.4	-9.3	-0.59	202.2	-7.2	-0.59
6QN6KT		194.4	-14.4	-0.92	188.6	-20.9	-1.72
6TDB6P		216.5	7.7	0.49	221.5	12.0	0.99
74T2JR		195.0	-13.8	-0.88	207.0	-2.5	-0.20
7FKMPL		204.0	-4.8	-0.30	206.5	-3.0	-0.24
7J43V8		229.0	20.2	1.29	219.5	10.0	0.82
8MZVKW		221.5	12.7	0.81	212.0	2.5	0.21
8XB22C		213.5	4.7	0.30	204.1	-5.4	-0.44
9L6KBE		207.5	-1.3	-0.08	207.0	-2.5	-0.20
9LWPG8	*	177.0	-31.8	-2.02	208.5	-1.0	-0.08
9VLVGE		195.6	-13.2	-0.84	201.6	-7.9	-0.65
9XX939		197.0	-11.8	-0.75	199.6	-9.8	-0.81
9ZMFM6		213.5	4.7	0.30	201.0	-8.5	-0.70
ATUF7A		246.5	37.7	2.40	231.0	21.5	1.76
AZHEZA		192.2	-16.6	-1.06	182.0	-27.5	-2.25
B4RU6R	*	249.6	40.8	2.60	244.9	35.4	2.90
B4U9CF	X	234.0	25.2	1.61	279.0	69.5	5.70
BKFR6G		225.5	16.8	1.07	235.7	26.2	2.15
BQ6ALD		239.3	30.5	1.94	234.2	24.8	2.03
BWXPBQ		198.7	-10.1	-0.64	207.4	-2.1	-0.17
C2JN47		215.5	6.7	0.43	208.5	-1.0	-0.08
C97RCE		199.5	-9.3	-0.59	212.0	2.5	0.21
C9GF79		189.3	-19.5	-1.24	190.0	-19.5	-1.60
DJT862		197.0	-11.8	-0.75	218.0	8.5	0.70
E398Y9	X	176.4	-32.4	-2.06	145.3	-64.2	-5.27
EWH32Y		204.0	-4.8	-0.30	210.0	0.5	0.04
EX8MV4	X	242.5	33.7	2.15	292.0	82.5	6.77
EY89LV		207.4	-1.4	-0.09	204.5	-5.0	-0.41

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
GG3E8U		230.5	21.7	1.38	218.0	8.5	0.70
GWVB6J	X	279.0	70.2	4.47	208.5	-1.0	-0.08
H3WHNT		203.0	-5.8	-0.37	222.5	13.0	1.07
H9KV62		203.9	-4.9	-0.31	200.2	-9.3	-0.77
HEUJ64		226.2	17.4	1.11	218.2	8.7	0.71
HKEL7E		215.5	6.7	0.43	212.5	3.0	0.25
JGEW3C		185.5	-23.3	-1.48	197.5	-12.0	-0.98
KCBM3U		187.7	-21.1	-1.34	205.5	-4.0	-0.32
KWX83J	*	218.0	9.2	0.59	191.5	-18.0	-1.48
KXFWQ7		216.4	7.6	0.49	205.0	-4.5	-0.37
LBUA2X		230.4	21.6	1.38	225.0	15.5	1.27
LF7U4H		193.7	-15.1	-0.96	201.7	-7.7	-0.63
LGHV7Y		228.3	19.5	1.24	223.6	14.1	1.16
LHZFYU		203.1	-5.7	-0.36	199.4	-10.1	-0.82
LKH2RV		175.0	-33.7	-2.15	195.1	-14.4	-1.18
LKPMJQ		220.5	11.7	0.75	216.0	6.5	0.53
LPJJ7W		202.0	-6.8	-0.43	200.0	-9.5	-0.78
MFM87K		209.6	0.8	0.05	201.6	-7.9	-0.65
MU63FP		226.5	17.7	1.13	211.0	1.5	0.12
NU2EG7		201.5	-7.3	-0.46	218.5	9.0	0.74
P8P2LH		210.9	2.1	0.13	218.1	8.7	0.71
PA9FPJ		189.3	-19.5	-1.24	187.8	-21.7	-1.78
PFVHX4		212.4	3.7	0.23	215.8	6.3	0.52
R68RLG		208.5	-0.3	-0.02	198.0	-11.5	-0.94
RNFTZU		194.8	-14.0	-0.89	197.0	-12.5	-1.02
TQ6VKU		201.5	-7.3	-0.47	201.1	-8.4	-0.69
U7TXGJ		174.0	-34.7	-2.21	184.9	-24.6	-2.01
UHTU6K		191.0	-17.8	-1.13	212.2	2.7	0.22
URGUF3		221.2	12.4	0.79	209.6	0.1	0.01
V2TADG	X	204.5	-4.3	-0.27	176.9	-32.5	-2.67
VBMNKE		205.5	-3.3	-0.21	215.0	5.5	0.45
VDRXDQ		209.8	1.0	0.06	214.1	4.6	0.37
VPKX8K		217.0	8.2	0.52	223.5	14.0	1.15
W799UM		207.4	-1.4	-0.09	202.3	-7.2	-0.59
XQRT7H		228.0	19.2	1.22	232.0	22.5	1.85
Y2ZM9F	X	250.5	41.7	2.66	261.5	52.0	4.27
YDK23N	X	211.0	2.2	0.14	281.5	72.0	5.91

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample B33-B34 Lab Mean	Sample B33-B34 Diff from Grand Mean	Sample B33-B34 CPV
YKH3U2		212.5	3.7	0.24	208.5	-1.0	-0.08
Z633WB		227.7	18.9	1.21	220.5	11.0	0.90
ZM3AQ4		209.0	0.2	0.01	215.9	6.5	0.53
ZRVAA6		191.5	-17.3	-1.10	212.5	3.0	0.25
ZVWEK6		222.0	13.2	0.84	219.6	10.2	0.83

Summary Statistics

	Sample B31-B32	Sample B33-B34
Grand Means	208.77 psi	209.48 psi
Stnd Dev Btwn Labs	15.71 psi	12.19 psi

Statistics based on 72 of 80 reporting participants

Summary Statistics in SI Units

	Sample B31-B32	Sample B33-B34
Grand Means	1.4394 MPa	1.4400 MPa
Stnd Dev Btwn Labs	0.1083 MPa	0.0800 MPa

Statistics based on 72 of 80 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #608

3LF9JD (X) - Data for sample group B33-B34 are high.

B4U9CF (X) - Data for sample group B33-B34 are high.

E398Y9 (X) - Data for sample group B33-B34 are low.

EX8MV4 (X) - Data for sample group B33-B34 are high.

GWVB6J (X) - Data for sample group B31-B32 are high.

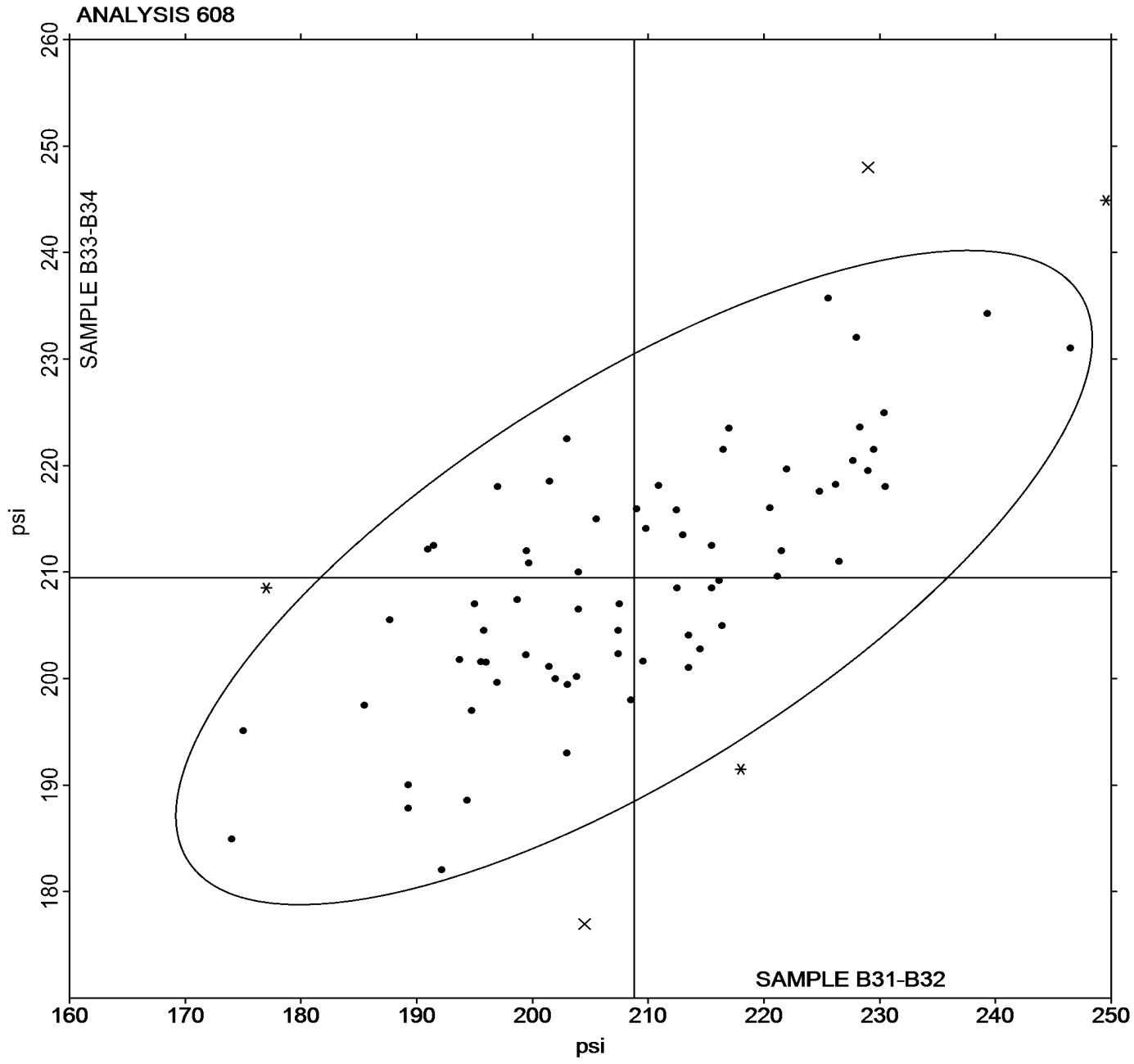
V2TADG (X) - Inconsistent in testing between samples.

Y2ZM9F (X) - Data for sample group B33-B34 are high.

YDK23N (X) - Data for sample group B33-B34 are high.

Grand Mean Sample **B31-B32** = 208.77 psi

Grand Mean Sample **B33-B34** = 209.48 psi



WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2T89Z9		50.00	1.02	0.63	50.50	1.62	1.09	BT
32WFX4		49.90	0.92	0.57	48.65	-0.23	-0.16	BT
36T3TD	*	45.00	-3.98	-2.44	45.00	-3.88	-2.62	XX
3FBNY8		46.00	-2.98	-1.83	47.35	-1.53	-1.04	BT
3GNUZX		49.90	0.92	0.57	50.10	1.22	0.82	BT
3LF9JD	*	46.00	-2.98	-1.83	48.00	-0.88	-0.60	BT
3T446W		49.00	0.02	0.01	48.50	-0.38	-0.26	HH
42RDPB		48.50	-0.48	-0.29	49.00	0.12	0.08	BT
46UC6A		48.00	-0.98	-0.60	48.00	-0.88	-0.60	BT
48VFRQ		48.65	-0.33	-0.20	48.95	0.07	0.04	BT
4GYWMW	X	14.00	-34.98	-21.45	11.50	-37.38	-25.26	BT
4KJ7BN		49.00	0.02	0.01	50.00	1.12	0.75	HH
4KKGBH		50.60	1.62	1.00	49.95	1.07	0.72	BT
6LUJWG		49.75	0.77	0.47	48.85	-0.03	-0.02	BT
6QN6KT		51.00	2.02	1.24	49.95	1.07	0.72	BT
6TDB6P		47.50	-1.48	-0.91	48.00	-0.88	-0.60	HH
74T2JR		48.80	-0.18	-0.11	49.35	0.47	0.31	BT
7FKMPL		48.50	-0.48	-0.29	48.50	-0.38	-0.26	BT
7J43V8		49.95	0.97	0.60	49.60	0.72	0.48	BT
8MZVKW		46.45	-2.53	-1.55	46.30	-2.58	-1.75	HH
8QZYE4	X	45.55	-3.43	-2.10	47.95	-0.93	-0.63	XX
8XB22C		47.70	-1.28	-0.78	47.75	-1.13	-0.77	BT
9L6KBE		52.00	3.02	1.85	52.00	3.12	2.10	BT
9LWPG8		52.00	3.02	1.85	51.00	2.12	1.43	HH
9VLVGE		50.45	1.47	0.90	49.75	0.87	0.58	BT
9XX939		47.25	-1.73	-1.06	47.00	-1.88	-1.27	BT
9ZMFM6		47.25	-1.73	-1.06	47.00	-1.88	-1.27	BT
A9BMK2		50.00	1.02	0.63	49.00	0.12	0.08	BT
ATUF7A		50.00	1.02	0.63	50.50	1.62	1.09	BT
AZHEZA		49.60	0.62	0.38	48.80	-0.08	-0.06	BT
B4RU6R		52.00	3.02	1.85	52.00	3.12	2.10	HH
B4U9CF		47.00	-1.98	-1.21	47.50	-1.38	-0.94	HH
BKFR6G	*	45.90	-3.08	-1.89	47.70	-1.18	-0.80	BT
BQ6ALD	*	47.50	-1.48	-0.91	46.00	-2.88	-1.95	BT
BWXPBQ		48.50	-0.48	-0.29	48.50	-0.38	-0.26	BT
C2JN47		47.00	-1.98	-1.21	47.50	-1.38	-0.94	HH
C97RCE		50.00	1.02	0.63	49.50	0.62	0.42	HH
C9GF79		49.00	0.02	0.01	49.00	0.12	0.08	BT

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
DJT862		48.00	-0.98	-0.60	48.25	-0.63	-0.43	HH
E398Y9		50.00	1.02	0.63	49.75	0.87	0.58	BT
EWH32Y	X	43.50	-5.48	-3.36	44.50	-4.38	-2.96	BT
EX8MV4		49.00	0.02	0.01	49.25	0.37	0.25	BT
EY89LV		49.00	0.02	0.01	48.75	-0.13	-0.09	BT
F4QA4E		48.00	-0.98	-0.60	48.00	-0.88	-0.60	HH
FHEHZF	*	46.00	-2.98	-1.83	45.00	-3.88	-2.62	BT
GG3E8U		48.00	-0.98	-0.60	48.00	-0.88	-0.60	BT
GWVB6J		49.50	0.52	0.32	50.00	1.12	0.75	HH
H3WHNT		48.20	-0.78	-0.48	47.70	-1.18	-0.80	BT
H9KV62		48.50	-0.48	-0.29	49.00	0.12	0.08	BT
HEUJ64		50.35	1.37	0.84	50.60	1.72	1.16	BT
HKEL7E		48.00	-0.98	-0.60	47.50	-1.38	-0.94	BT
JGEW3C		49.80	0.82	0.50	50.05	1.17	0.79	BT
KBJHX2		49.50	0.52	0.32	49.00	0.12	0.08	HH
KCBM3U		50.05	1.07	0.66	50.60	1.72	1.16	BT
KWX83J	X	50.15	1.17	0.72	47.40	-1.48	-1.00	BT
KXFWQ7		50.00	1.02	0.63	48.50	-0.38	-0.26	HH
LBUA2X		48.00	-0.98	-0.60	48.50	-0.38	-0.26	BT
LF7U4H		47.35	-1.63	-1.00	48.50	-0.38	-0.26	BT
LGHV7Y		51.20	2.22	1.36	50.95	2.07	1.40	BT
LHZFYU		51.25	2.27	1.39	50.75	1.87	1.26	BT
LKH2RV		49.00	0.02	0.01	50.00	1.12	0.75	BT
LKPMJQ		50.00	1.02	0.63	49.00	0.12	0.08	BT
LPJJ7W		48.00	-0.98	-0.60	47.50	-1.38	-0.94	BT
MFM87K		50.90	1.92	1.18	50.40	1.52	1.02	BT
MU63FP		48.00	-0.98	-0.60	48.00	-0.88	-0.60	BT
NU2EG7		49.55	0.57	0.35	48.90	0.02	0.01	BT
P8P2LH		48.50	-0.48	-0.29	47.50	-1.38	-0.94	BT
PA9FPJ		46.45	-2.53	-1.55	47.15	-1.73	-1.17	BT
PFVHX4		46.50	-2.48	-1.52	46.50	-2.38	-1.61	HH
QUVZMM		51.50	2.52	1.55	51.50	2.62	1.77	HH
R68RLG		51.30	2.32	1.42	49.90	1.02	0.69	BT
RNFTZU		51.00	2.02	1.24	50.00	1.12	0.75	BT
RXR4VL		48.00	-0.98	-0.60	48.50	-0.38	-0.26	BT
TQ6VKU		49.45	0.47	0.29	47.85	-1.03	-0.70	BT
U7TXGJ		46.50	-2.48	-1.52	46.75	-2.13	-1.44	BT

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
UHTU6K		52.25	3.27	2.01	52.00	3.12	2.10	HH
URGUF3		49.35	0.37	0.23	47.95	-0.93	-0.63	BT
V2TADG		49.50	0.52	0.32	49.50	0.62	0.42	BT
VBMNKE		49.82	0.84	0.52	50.15	1.27	0.85	BT
VDRXDQ		49.50	0.52	0.32	50.00	1.12	0.75	BT
VPKX8K		48.85	-0.13	-0.08	48.95	0.07	0.04	BT
W799UM		45.80	-3.18	-1.95	46.55	-2.33	-1.58	BT
XQRT7H		49.50	0.52	0.32	49.50	0.62	0.42	HH
Y2ZM9F		47.60	-1.38	-0.84	47.85	-1.03	-0.70	BT
YDK23N		50.00	1.02	0.63	50.00	1.12	0.75	BT
YKH3U2		51.00	2.02	1.24	51.50	2.62	1.77	BT
Z633WB		50.95	1.97	1.21	49.85	0.97	0.65	BT
ZM3AQ4		48.85	-0.13	-0.08	48.15	-0.73	-0.50	BT
ZRVAA6		50.00	1.02	0.63	50.00	1.12	0.75	HH
ZVWEK6		49.00	0.02	0.01	49.00	0.12	0.08	BT

Summary Statistics

	Sample B31-B32	Sample B33-B34
Grand Means	48.976 Type A	48.885 Type A
Stnd Dev Btwn Labs	1.631 Type A	1.480 Type A

Statistics based on 86 of 90 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #620

4GYWMW (X) - Extreme Data.

8QZYE4 (X) - Inconsistent in testing between samples.

EWH32Y (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B31-B32.

KWX83J (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group B33-B34.

Key to Instrument Codes Reported by Participants

BT Benchtop

HH Handheld

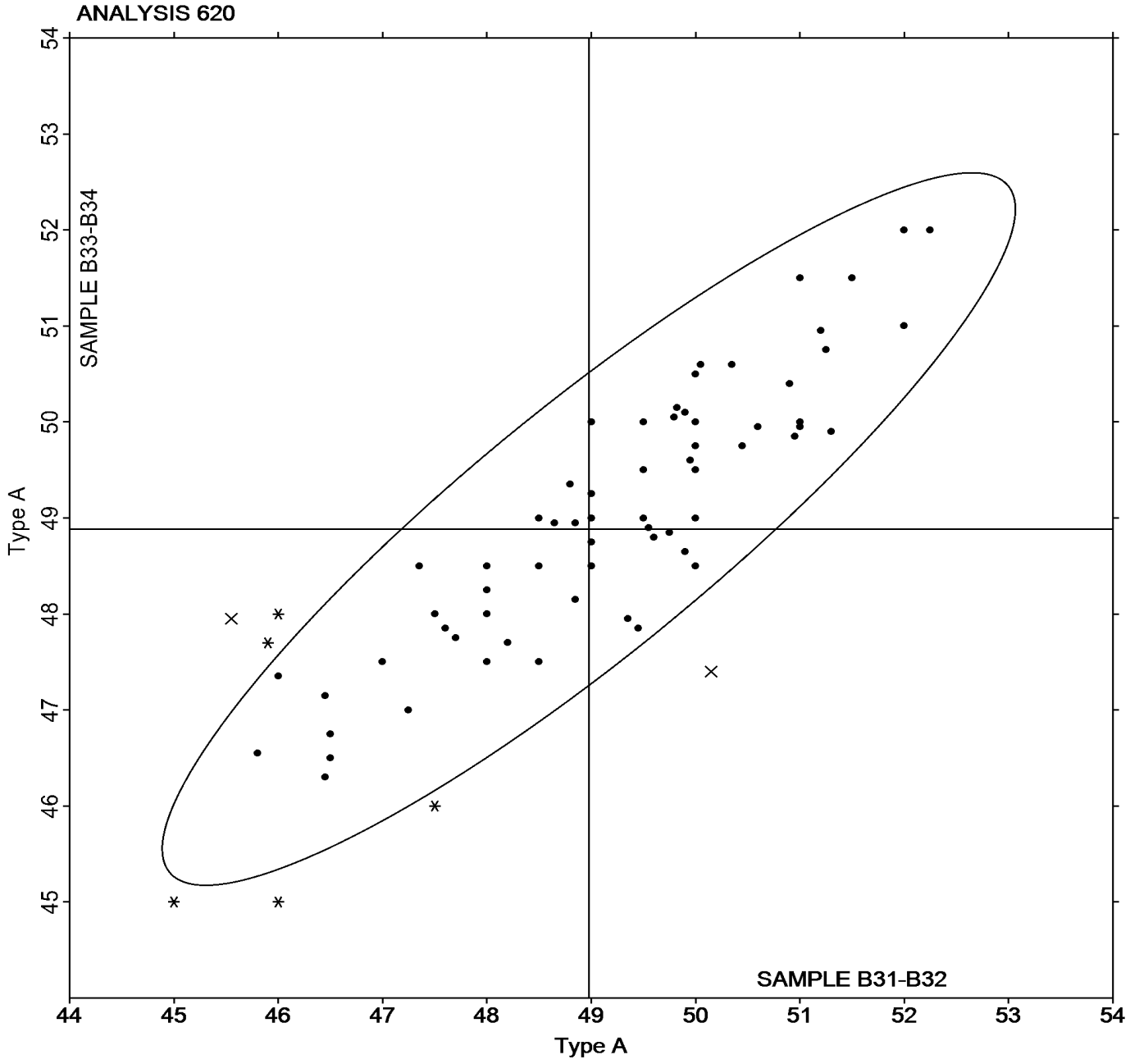
XX Specify Benchtop or Handheld Instrument

Results by Reading Time (as reported by laboratory)

	Sample B31-B32 *Polyisoprene compound, batch #1*			Sample B33-B34 *Polyisoprene compound, batch #2*				
Reading Time	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	Labs Incl	/ Rpt
Readings taken within 0 - 5 seconds	49.42	1.42	0.45	49.26	1.27	0.38	56	58
Readings taken at 5 seconds	48.30	1.55	-0.67	48.30	1.20	-0.58	9	11
Readings taken after 5+ seconds	49.71	1.06	0.74	49.18	1.83	0.29	4	7
Maximum hardness indicator used	48.35	1.52	-0.63	48.53	1.42	-0.36	12	12

Grand Mean Sample **B31-B32** = 48.976 Type A

Grand Mean Sample **B33-B34** = 48.885 Type A



WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
32WFX4	X	1.110	-0.022	-6.29	1.108	-0.025	-6.66
3LF9JD		1.125	-0.008	-2.16	1.127	-0.006	-1.70
3T446W		1.137	0.004	1.25	1.138	0.005	1.42
42RDPB		1.127	-0.006	-1.60	1.129	-0.003	-0.93
48VFRQ		1.126	-0.006	-1.75	1.128	-0.005	-1.42
4GYWMW		1.130	-0.003	-0.74	1.130	-0.003	-0.75
4KKGBH		1.134	0.001	0.38	1.132	0.000	-0.12
6LUJWG		1.134	0.001	0.40	1.133	0.000	0.06
6QN6KT		1.133	0.000	-0.03	1.131	-0.001	-0.37
6TDB6P		1.136	0.003	0.82	1.138	0.005	1.28
74T2JR		1.139	0.006	1.72	1.137	0.005	1.27
7FKMPL		1.133	0.000	0.11	1.134	0.001	0.33
7J43V8		1.124	-0.009	-2.44	1.124	-0.009	-2.38
8MZVKW		1.132	0.000	-0.07	1.131	-0.001	-0.37
8XB22C		1.133	0.000	0.11	1.134	0.001	0.20
9L6KBE		1.133	0.000	-0.03	1.134	0.001	0.20
9LWPG8		1.134	0.001	0.28	1.134	0.001	0.33
9VLVGE		1.132	-0.001	-0.31	1.131	-0.002	-0.62
9ZMFM6		1.136	0.004	1.07	1.136	0.003	0.85
A9BMK2		1.134	0.001	0.26	1.135	0.002	0.60
ATUF7A		1.134	0.001	0.27	1.134	0.002	0.45
B4RU6R	*	1.123	-0.010	-2.83	1.123	-0.010	-2.72
B4U9CF		1.130	-0.002	-0.61	1.130	-0.003	-0.85
BKFR6G		1.128	-0.004	-1.26	1.128	-0.005	-1.34
BQ6ALD		1.133	0.000	0.01	1.130	-0.002	-0.65
C2JN47		1.131	-0.002	-0.51	1.131	-0.002	-0.55
C97RCE	*	1.136	0.003	0.82	1.132	-0.001	-0.21
C9GF79		1.133	0.000	0.11	1.130	-0.003	-0.75
DJT862		1.130	-0.002	-0.67	1.132	-0.001	-0.35
E398Y9	X	1.128	-0.005	-1.31	1.123	-0.010	-2.79
EWH32Y		1.136	0.003	0.97	1.136	0.003	0.88
EX8MV4		1.138	0.005	1.45	1.140	0.007	1.83
EY89LV		1.134	0.001	0.26	1.134	0.001	0.20
F4QA4E		1.135	0.002	0.68	1.137	0.004	1.01
GG3E8U		1.136	0.004	1.08	1.138	0.006	1.53
GWVB6J		1.135	0.002	0.54	1.134	0.001	0.33
H3WHNT		1.137	0.004	1.25	1.138	0.005	1.28
H9KV62		1.132	0.000	-0.04	1.133	0.000	0.01

WebCode	Data Flag	Sample B31-B32 Lab Mean	Diff from Grand Mean	CPV	Sample B33-B34 Lab Mean	Diff from Grand Mean	CPV
JGEW3C		1.132	-0.001	-0.31	1.133	0.000	-0.07
KBJHX2	*	1.125	-0.008	-2.30	1.123	-0.010	-2.66
KCBM3U		1.135	0.003	0.71	1.136	0.004	0.97
KWX83J		1.131	-0.002	-0.60	1.132	-0.001	-0.35
KXFWQ7		1.127	-0.006	-1.59	1.127	-0.006	-1.57
LF7U4H		1.133	0.001	0.21	1.133	0.000	0.07
LHZFYU		1.136	0.003	0.97	1.138	0.005	1.42
LKH2RV	X	0.075	-1.057	-300.28	0.074	-1.059	-287.57
LKPMJQ		1.138	0.005	1.53	1.139	0.006	1.56
LPJJ7W		1.132	-0.001	-0.31	1.132	-0.001	-0.35
MFM87K		1.133	0.000	0.11	1.133	0.000	-0.07
P8P2LH		1.133	0.000	-0.01	1.134	0.002	0.44
PA9FPJ		1.132	0.000	-0.06	1.134	0.002	0.41
PFVHX4		1.137	0.004	1.11	1.135	0.002	0.60
QUVZMM	X	70.460	69.327	19,692.09	70.505	69.372	18,846.07
R68RLG		1.134	0.001	0.26	1.135	0.002	0.47
RNFTZU		1.133	0.000	0.11	1.131	-0.002	-0.62
RXR4VL		1.133	0.000	0.11	1.133	0.000	-0.07
TQ6VKU		1.135	0.002	0.54	1.133	0.000	0.10
U7TXGJ		1.136	0.003	0.82	1.135	0.002	0.60
V2TADG	X	1.955	0.822	233.60	1.925	0.792	215.22
VPKX8K		1.137	0.004	1.25	1.137	0.004	1.15
W799UM		1.133	0.000	0.11	1.134	0.001	0.33
XQRT7H		1.133	0.000	0.09	1.133	0.000	0.10
Y2ZM9F		1.129	-0.003	-0.98	1.130	-0.002	-0.63
YDK23N		1.131	-0.002	-0.45	1.133	0.000	-0.07
Z633WB		1.132	0.000	-0.13	1.134	0.001	0.26
ZM3AQ4	X	1.122	-0.011	-3.01	1.127	-0.006	-1.57

Summary Statistics

	Sample B31-B32		Sample B33-B34	
Grand Means	1.1326	g/cm^3 (Mg/m^3)	1.1328	g/cm^3 (Mg/m^3)
Stnd Dev Btwn Labs	0.0035	g/cm^3 (Mg/m^3)	0.0037	g/cm^3 (Mg/m^3)

Statistics based on 60 of 66 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & B33-B34: Polyisoprene compound, batch #2

Comments on Assigned Data Flags for Test #621

32WFX4 (X) - Data for all samples are low. Possible Systematic Error. Inconsistent within the determinations of sample group B33-B34.

E398Y9 (X) - Data for sample group B33-B34 are low.

LKH2RV (X) - Extreme Data.

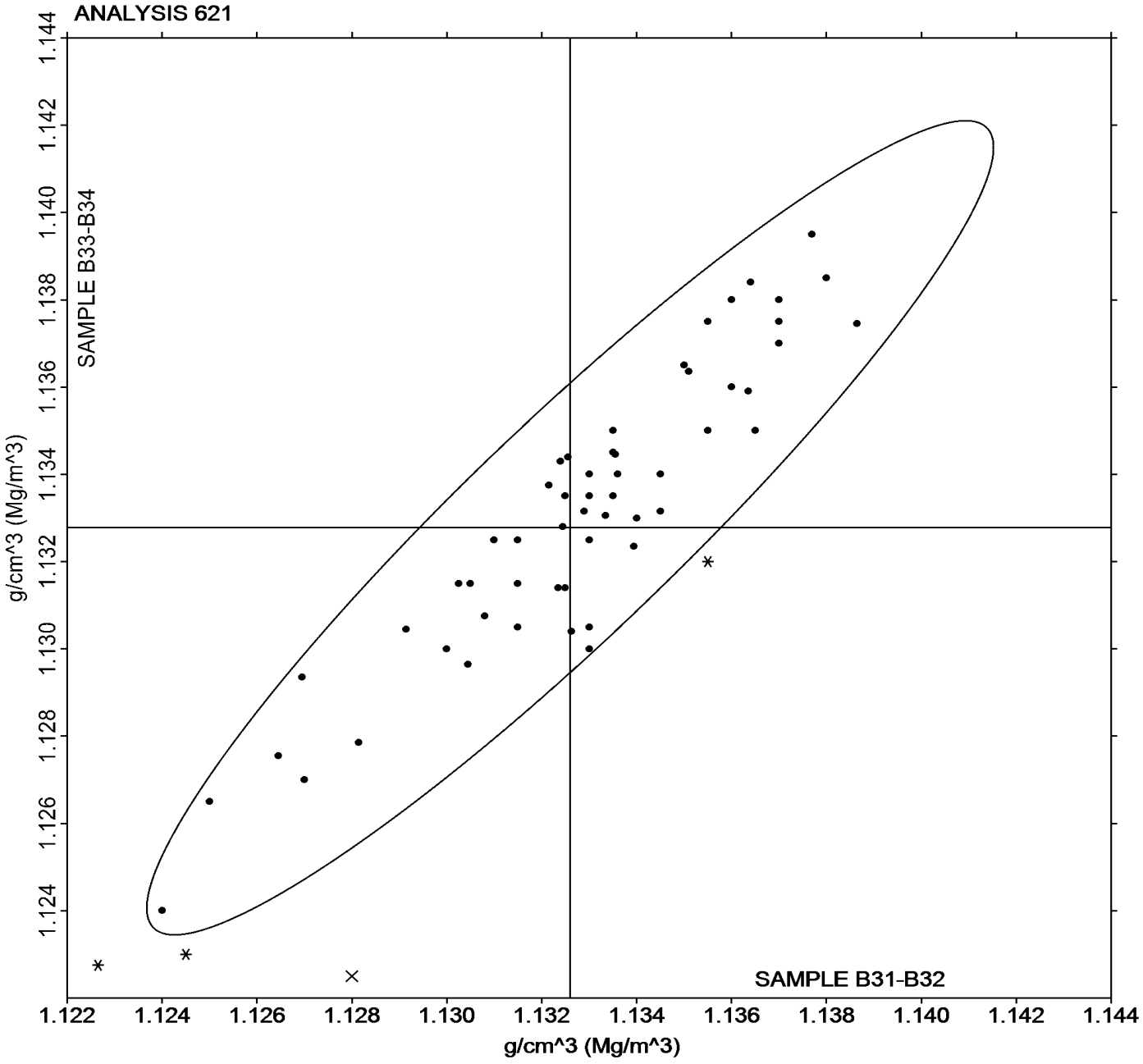
QUVZMM (X) - Extreme Data.

V2TADG (X) - Extreme Data.

ZM3AQ4 (X) - Data for sample group B31-B32 are low.

Grand Mean Sample **B31-B32** = 1.1326 g/cm^3 (Mg/m^3)

Grand Mean Sample **B33-B34** = 1.1328 g/cm^3 (Mg/m^3)



WebCode	Data Flag	Sample HB31-HB32 Lab Mean	Diff from Grand Mean	CPV	Sample HB33-HB34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3FBNY8		73.10	-2.56	-1.18	83.20	-0.48	-0.35	BT
3GNUZX		75.10	-0.56	-0.26	83.70	0.02	0.01	BT
4GYWMW		72.50	-3.16	-1.46	81.50	-2.18	-1.57	BT
67GDJW		76.00	0.34	0.16	84.50	0.82	0.59	BT
6QN6KT		72.95	-2.71	-1.25	81.60	-2.08	-1.50	BT
8QZYE4		77.00	1.34	0.62	83.50	-0.18	-0.13	HH
8WHXP4		77.50	1.84	0.85	85.50	1.82	1.31	BT
979EU6		80.00	4.34	2.01	86.45	2.77	2.00	BT
9L6KBE		74.50	-1.16	-0.53	82.00	-1.68	-1.21	BT
9XCFL4		74.00	-1.66	-0.77	84.00	0.32	0.23	XX
AC76GM		77.00	1.34	0.62	84.00	0.32	0.23	XX
B6MD9E		74.65	-1.01	-0.47	82.65	-1.03	-0.74	BT
C4L8YX		74.35	-1.31	-0.60	83.20	-0.48	-0.35	BT
C97RCE		79.00	3.34	1.55	85.50	1.82	1.31	HH
E398Y9		74.15	-1.51	-0.70	83.35	-0.33	-0.24	BT
F4DJDJ	X	65.75	-9.91	-4.58	76.75	-6.93	-5.00	BT
JGEW3C	X	93.90	18.24	8.44	93.60	9.92	7.15	BT
KBJHX2		78.00	2.34	1.08	84.50	0.82	0.59	HH
LHZFYU		74.70	-0.96	-0.44	83.20	-0.48	-0.35	BT
M3Y8AQ		76.55	0.89	0.41	84.25	0.57	0.41	HH
N3GCNJ		76.25	0.59	0.28	83.25	-0.43	-0.31	BT
NU2EG7		74.15	-1.51	-0.70	83.50	-0.18	-0.13	BT
RDJ79J		79.50	3.84	1.78	86.00	2.32	1.67	HH
RNFTZU		72.50	-3.16	-1.46	81.00	-2.68	-1.93	HH
RYJTRG		75.05	-0.61	-0.28	83.70	0.02	0.01	HH
TQ6VKU		76.15	0.49	0.23	83.30	-0.38	-0.28	BT
UTCDJP		77.70	2.04	0.95	85.50	1.82	1.31	HH
VDRXDQ		74.50	-1.16	-0.53	83.00	-0.68	-0.49	XX
YJ8284	X	43.50	-32.16	-14.87	46.50	-37.18	-26.80	HH
YKH3U2		73.00	-2.66	-1.23	82.00	-1.68	-1.21	BT
ZLQFB4		78.50	2.84	1.32	85.25	1.57	1.13	BT

Summary Statistics

	Sample HB31-HB32	Sample HB33-HB34
Grand Means	75.655 Type D	83.682 Type D
Stnd Dev Btwn Labs	2.162 Type D	1.387 Type D

Statistics based on 28 of 31 reporting participants

Samples HB31-HB32: Hardness Disc, batch #1 & HB33-HB34: Hardness Disc, batch #2

Comments on Assigned Data Flags for Test #625

F4DJDJ (X) - Data for all samples are low. Inconsistent within the determinations of sample group HB31-HB32.

JGEW3C (X) - Data for all samples are high.

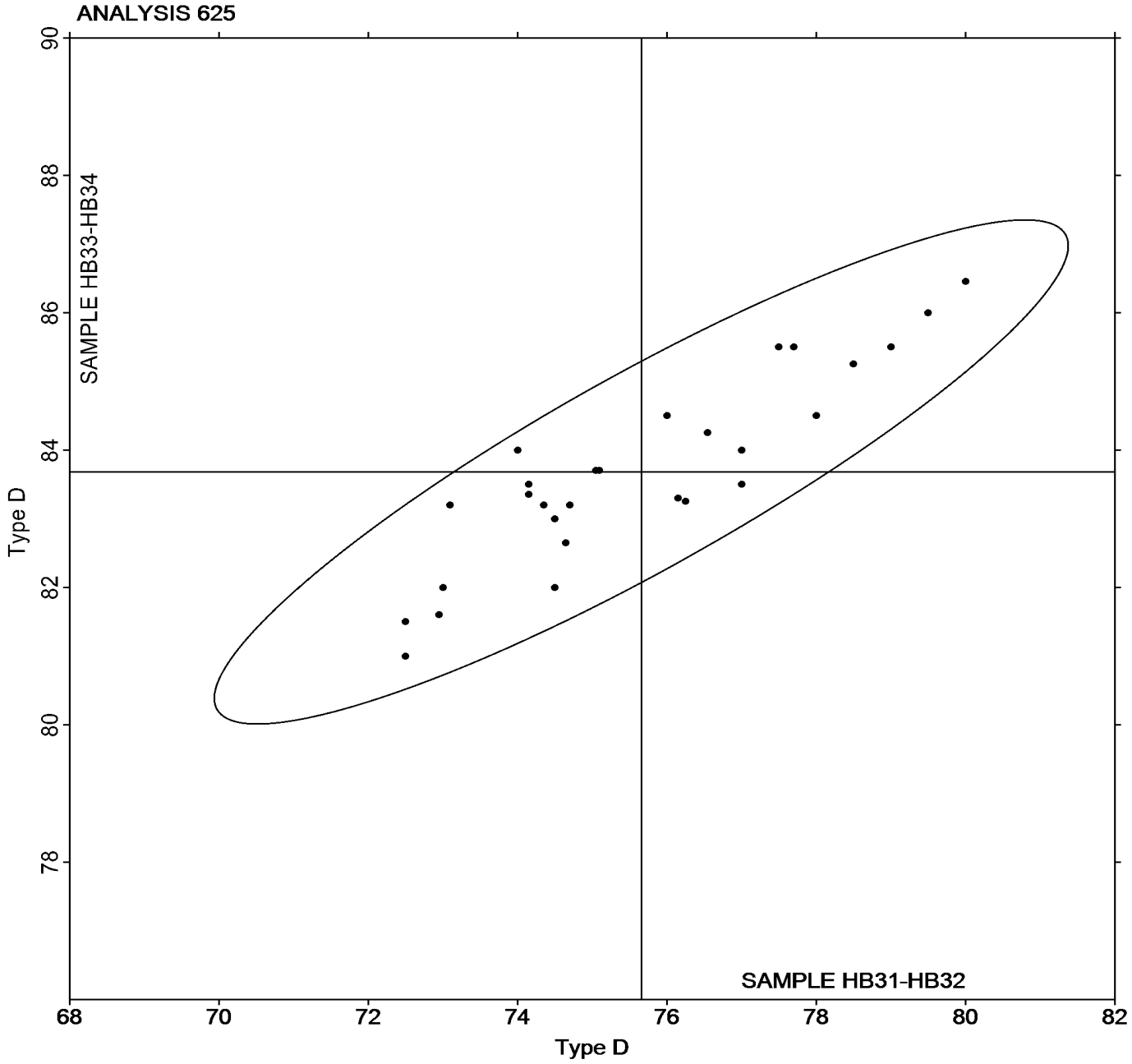
YJ8284 (X) - Extreme Data.

Key to Instrument Codes Reported by Participants

BT	Benchtop	HH	Handheld
XX	Specify Benchtop or Handheld Instrument		

Grand Mean Sample **HB31-HB32** = 75.655 Type D

Grand Mean Sample **HB33-HB34** = 83.682 Type D



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

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample K31-K32 Lab Mean	Sample K31-K32 Diff from Grand Mean	Sample K31-K32 CPV
3LF9JD		3,015.0	-222.1	-1.16	2,170.0	-553.2	-1.78
3T446W		2,875.0	-362.1	-1.89	2,760.0	36.8	0.12
48VFRQ		3,462.2	225.1	1.18	2,879.0	155.8	0.50
4KJ7BN		3,074.8	-162.3	-0.85	2,726.7	3.5	0.01
4KKGBH	*	3,363.0	125.9	0.66	1,942.0	-781.2	-2.52
6QN6KT		3,042.2	-194.9	-1.02	2,707.2	-16.0	-0.05
6TDB6P		3,520.0	282.9	1.48	3,005.0	281.8	0.91
74T2JR		3,359.0	121.9	0.64	2,895.5	172.3	0.56
7FKMPL		3,346.5	109.4	0.57	2,719.0	-4.2	-0.01
8MZVKW		3,144.5	-92.6	-0.48	2,958.5	235.3	0.76
B4RU6R		3,336.2	99.1	0.52	2,607.2	-116.0	-0.37
BKFR6G		3,178.5	-58.6	-0.31	2,673.8	-49.4	-0.16
EY89LV		3,038.6	-198.5	-1.04	2,625.2	-98.0	-0.32
GWVB6J		3,554.5	317.4	1.66	2,535.0	-188.2	-0.61
JGEW3C		3,137.0	-100.1	-0.52	2,923.5	200.3	0.65
KCBM3U		3,338.7	101.7	0.53	2,903.5	180.3	0.58
KXFWQ7		3,236.1	-1.0	-0.01	2,852.1	128.9	0.42
LF7U4H		3,305.4	68.3	0.36	2,944.3	221.1	0.71
LGHV7Y		3,271.7	34.6	0.18	2,847.2	124.0	0.40
LHZFYU		3,176.4	-60.7	-0.32	2,915.3	192.1	0.62
MU63FP		3,472.5	235.4	1.23	2,920.0	196.8	0.63
PFVHX4		2,795.0	-442.1	-2.31	2,790.0	66.8	0.22
RNFTZU		3,319.3	82.2	0.43	2,811.0	87.8	0.28
TQ6VKU		3,120.8	-116.3	-0.61	2,844.6	121.4	0.39
V2TADG	*	3,265.6	28.5	0.15	1,791.2	-932.0	-3.01
ZM3AQ4		3,416.1	179.0	0.94	3,056.4	333.2	1.07

Summary Statistics

	Sample B31-B32	Sample K31-K32
Grand Means	3,237.09 psi	2,723.20 psi
Stnd Dev Btwn Labs	191.21 psi	310.04 psi

Statistics based on 26 of 26 reporting participants

Summary Statistics in SI Units

Grand Means	22.319 MPa	18.780 MPa
Stnd Dev Btwn Labs	1.318 MPa	2.140 MPa

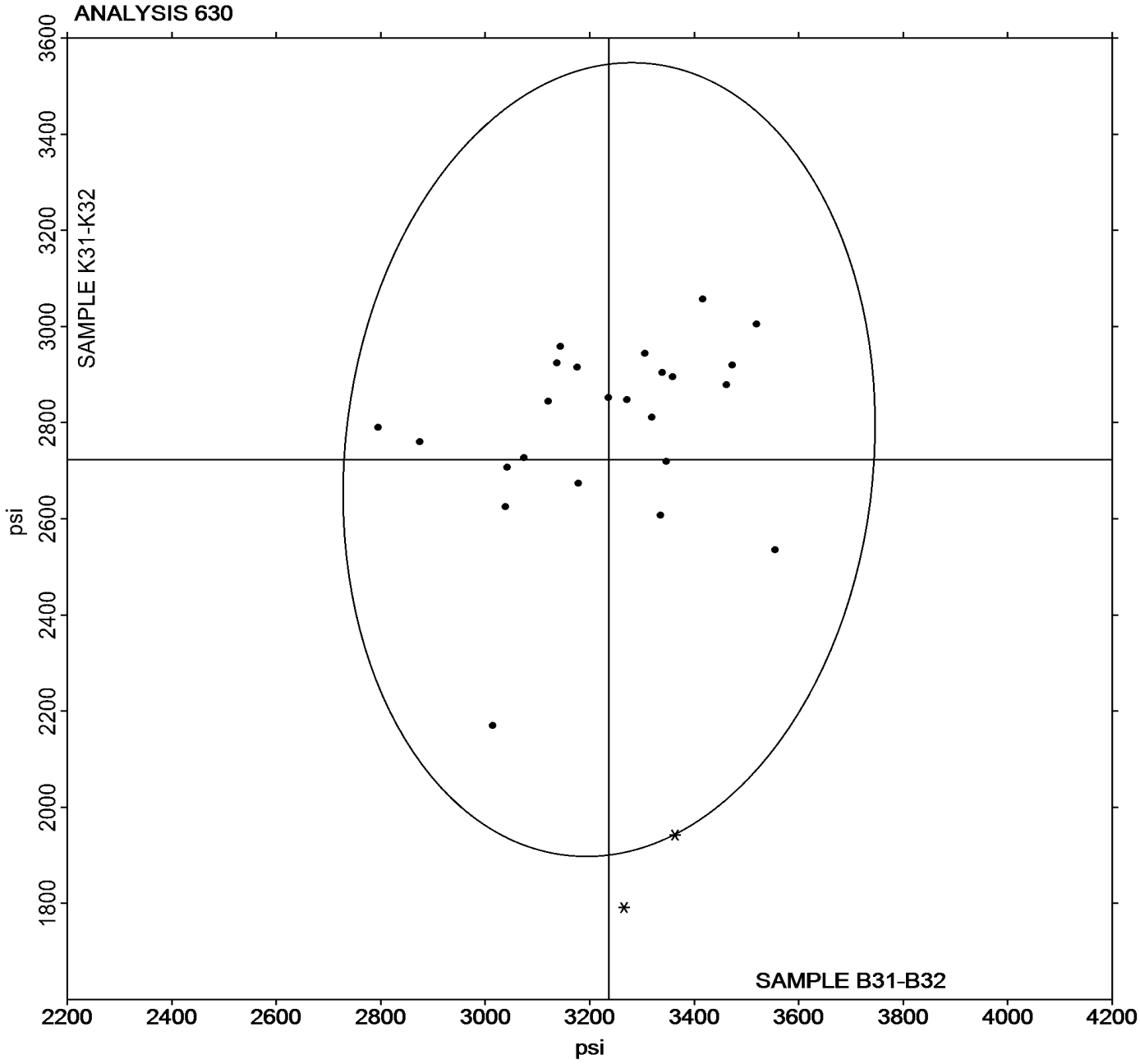
Statistics based on 26 of 26 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & K31-K32: Polyisoprene compound, batch #1

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

Grand Mean Sample **B31-B32** = 3,237.09 psi

Grand Mean Sample **K31-K32** = 2,723.20 psi



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

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample K31-K32 Lab Mean	Sample K31-K32 Diff from Grand Mean	Sample K31-K32 CPV
3LF9JD	*	520.5	-92.9	-2.33	440.0	-126.1	-2.89
3T446W		552.5	-60.9	-1.52	562.0	-4.1	-0.10
48VFRQ		632.5	19.1	0.48	581.3	15.2	0.35
4KJ7BN		586.0	-27.4	-0.69	577.0	10.9	0.25
4KKGBH		619.5	6.1	0.15	507.5	-58.6	-1.34
6QN6KT		600.0	-13.4	-0.34	567.0	0.9	0.02
6TDB6P		602.0	-11.4	-0.29	550.5	-15.6	-0.36
74T2JR		643.0	29.6	0.74	575.5	9.4	0.21
7FKMPL		638.5	25.1	0.63	576.0	9.9	0.23
8MZVKW		668.5	55.1	1.38	585.0	18.9	0.43
B4RU6R		563.9	-49.5	-1.24	488.8	-77.4	-1.77
BKFR6G		642.5	29.1	0.73	590.5	24.4	0.56
EY89LV		584.0	-29.4	-0.74	559.5	-6.6	-0.15
GWVB6J		639.0	25.6	0.64	562.0	-4.1	-0.10
JGEW3C		604.5	-8.9	-0.22	602.5	36.4	0.83
KCBM3U		650.5	37.1	0.93	610.5	44.4	1.02
KXFWQ7		622.8	9.4	0.23	563.5	-2.6	-0.06
LF7U4H	*	712.5	99.1	2.48	600.4	34.3	0.79
LGHV7Y		593.4	-20.0	-0.50	538.2	-28.0	-0.64
LHZFYU		627.4	14.0	0.35	602.7	36.6	0.84
MU63FP		600.0	-13.4	-0.34	563.0	-3.1	-0.07
PFVHX4	*	657.0	43.6	1.09	677.5	111.4	2.55
RNFTZU		577.0	-36.4	-0.91	545.5	-20.6	-0.47
TQ6VKU		622.5	9.1	0.23	583.5	17.4	0.40
V2TADG		577.6	-35.8	-0.90	539.5	-26.7	-0.61
ZM3AQ4		610.8	-2.6	-0.06	570.5	4.3	0.10

Summary Statistics

	Sample B31-B32	Sample K31-K32
Grand Means	613.40 percent	566.15 percent
Stnd Dev Btwn Labs	39.95 percent	43.64 percent

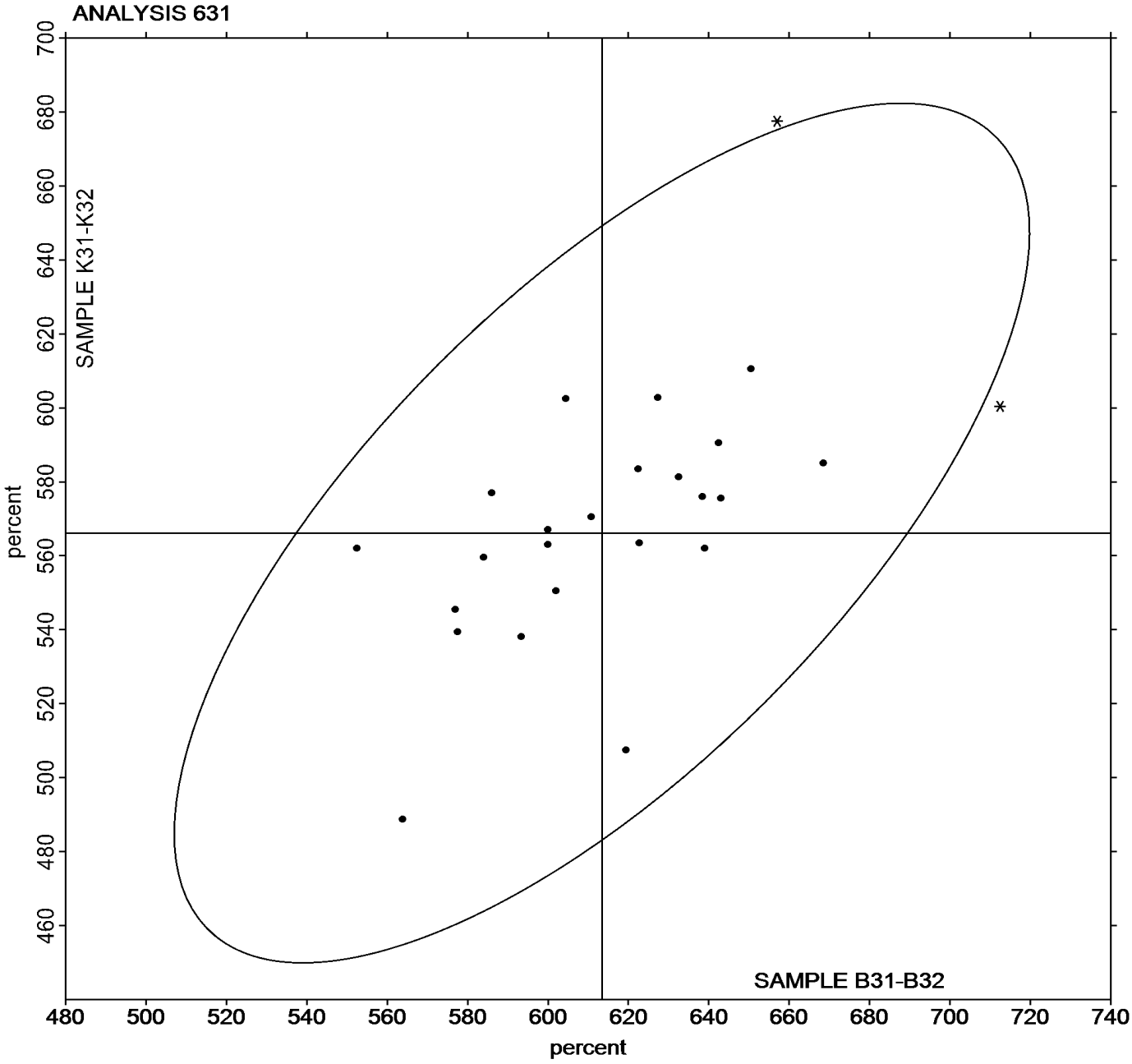
Statistics based on 26 of 26 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & K31-K32: Polyisoprene compound, batch #1

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

Grand Mean Sample **B31-B32** = 613.40 percent

Grand Mean Sample **K31-K32** = 566.15 percent



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

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample K31-K32 Lab Mean	Sample K31-K32 Diff from Grand Mean	Sample K31-K32 CPV
3LF9JD		1,145.0	187.0	1.45	1,250.0	297.5	2.37
3T446W		948.0	-10.0	-0.08	981.5	29.0	0.23
48VFRQ		965.7	7.6	0.06	910.9	-41.7	-0.33
4KJ7BN		973.2	15.2	0.12	949.3	-3.2	-0.03
4KKGBH		1,072.0	114.0	0.89	856.5	-96.0	-0.76
6QN6KT		916.6	-41.4	-0.32	919.5	-33.0	-0.26
6TDB6P		1,017.0	59.0	0.46	1,036.0	83.5	0.66
74T2JR		896.0	-62.0	-0.48	933.0	-19.5	-0.16
7FKMPL		935.0	-23.0	-0.18	912.5	-40.0	-0.32
8MZVKW		822.0	-136.0	-1.06	879.0	-73.5	-0.59
B4RU6R	*	1,287.5	329.5	2.56	1,229.9	277.4	2.21
BKFR6G		881.8	-76.2	-0.59	866.6	-85.9	-0.68
EY89LV		984.8	26.8	0.21	966.0	13.5	0.11
GWVB6J		999.0	41.0	0.32	853.0	-99.5	-0.79
JGEW3C		882.0	-76.0	-0.59	872.5	-80.0	-0.64
KCBM3U		858.9	-99.2	-0.77	921.1	-31.4	-0.25
KXFWQ7		973.8	15.8	0.12	1,052.9	100.4	0.80
LF7U4H	*	597.6	-360.5	-2.80	946.4	-6.1	-0.05
LGHV7Y		1,061.9	103.8	0.81	1,139.2	186.6	1.49
LHZFYU		929.0	-29.0	-0.23	897.1	-55.4	-0.44
MU63FP		1,061.0	103.0	0.80	978.5	26.0	0.21
PFVHX4		763.0	-195.0	-1.52	801.9	-150.6	-1.20
RNFTZU		975.8	17.7	0.14	996.0	43.5	0.35
TQ6VKU		906.2	-51.8	-0.40	944.8	-7.7	-0.06
V2TADG	*	1,058.1	100.0	0.78	640.3	-312.2	-2.48
ZM3AQ4		997.9	39.9	0.31	1,030.9	78.4	0.62

Summary Statistics

	Sample B31-B32	Sample K31-K32
Grand Means	958.02 psi	952.51 psi
Stnd Dev Btwn Labs	128.66 psi	125.62 psi

Statistics based on 26 of 26 reporting participants

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

Summary Statistics in SI Units

Grand Means	6.6053 MPa	6.5700 MPa
Stnd Dev Btwn Labs	0.8871 MPa	0.8700 MPa

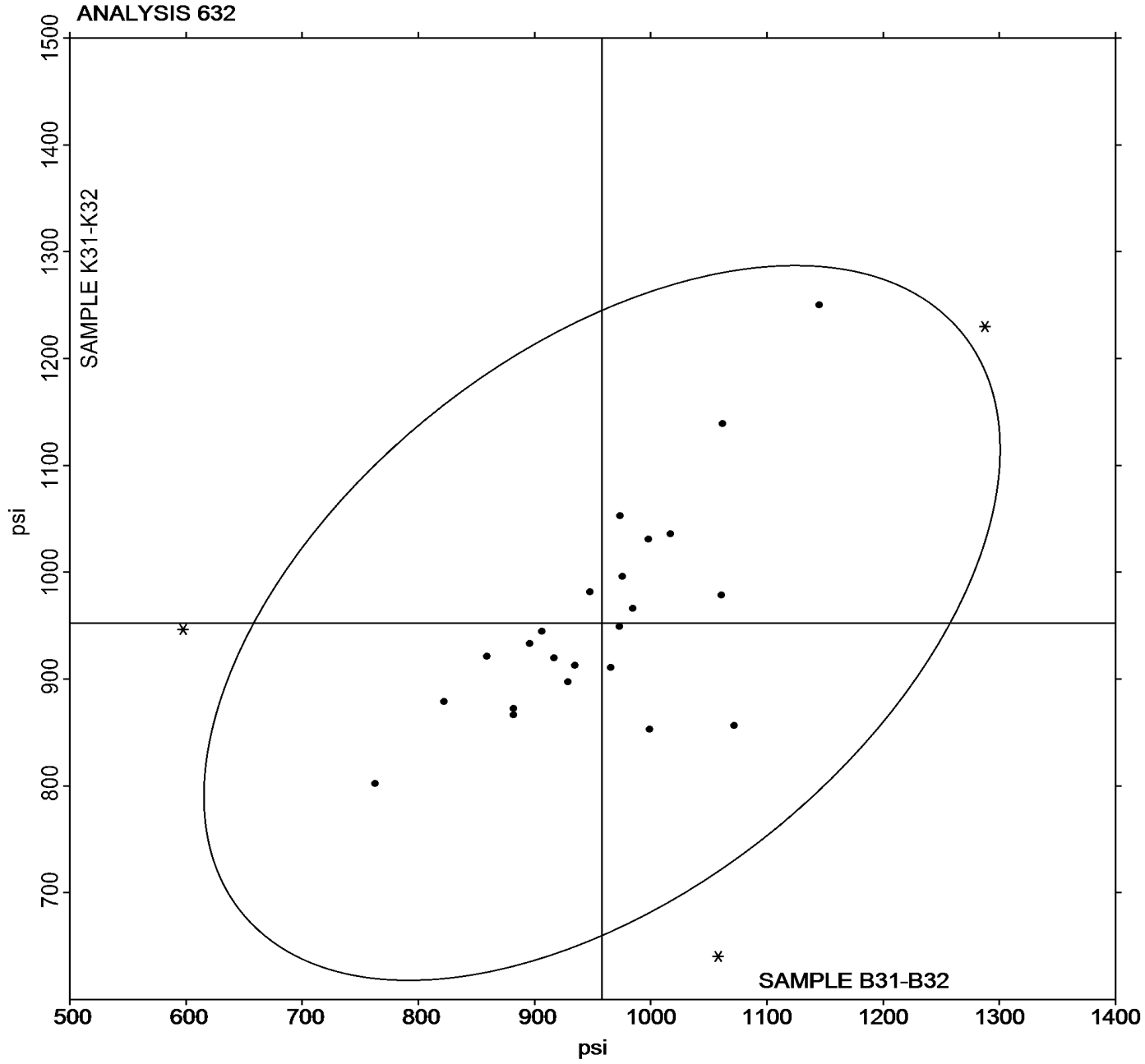
Statistics based on 26 of 26 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & K31-K32: Polyisoprene compound, batch #1

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

Grand Mean Sample **B31-B32** = 958.02 psi

Grand Mean Sample **K31-K32** = 952.51 psi



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

WebCode	Data Flag	Sample B31-B32 Lab Mean	Sample B31-B32 Diff from Grand Mean	Sample B31-B32 CPV	Sample K31-K32 Lab Mean	Sample K31-K32 Diff from Grand Mean	Sample K31-K32 CPV
3LF9JD	*	229.0	17.8	1.10	275.0	51.9	2.68
3T446W		196.0	-15.2	-0.94	210.5	-12.6	-0.65
48VFRQ		216.2	5.0	0.31	217.8	-5.3	-0.27
4KJ7BN		224.8	13.6	0.84	224.8	1.7	0.09
4KKGBH	*	229.5	18.3	1.13	192.5	-30.6	-1.58
6QN6KT		194.4	-16.8	-1.04	194.4	-28.7	-1.48
6TDB6P		216.5	5.3	0.33	241.0	17.9	0.93
74T2JR		195.0	-16.2	-1.00	215.0	-8.1	-0.42
7FKMPL		204.0	-7.2	-0.44	216.5	-6.6	-0.34
8MZVKW		221.5	10.3	0.64	224.5	1.4	0.07
B4RU6R		249.6	38.4	2.37	252.6	29.5	1.52
BKFR6G		225.5	14.4	0.89	237.1	14.1	0.73
EY89LV		207.4	-3.8	-0.23	213.2	-9.9	-0.51
GWVB6J	X	279.0	67.8	4.19	194.5	-28.6	-1.48
JGEW3C		185.5	-25.7	-1.59	204.5	-18.6	-0.96
KCBM3U		187.7	-23.5	-1.45	211.9	-11.1	-0.58
KXFWQ7		216.4	5.2	0.32	232.3	9.2	0.48
LF7U4H		193.7	-17.5	-1.08	217.6	-5.5	-0.28
LGHV7Y		228.3	17.1	1.06	256.4	33.3	1.72
LHZFYU		203.1	-8.1	-0.50	203.8	-19.3	-1.00
MU63FP		226.5	15.3	0.95	215.5	-7.6	-0.39
PFVHX4		212.4	1.3	0.08	234.3	11.2	0.58
RNFTZU		194.8	-16.4	-1.01	215.5	-7.6	-0.39
TQ6VKU		201.5	-9.7	-0.60	217.4	-5.7	-0.30
V2TADG	X	204.5	-6.7	-0.41	128.4	-94.7	-4.89
ZM3AQ4		209.0	-2.2	-0.13	230.0	6.9	0.36

Summary Statistics

	Sample B31-B32	Sample K31-K32
Grand Means	211.17 psi	223.08 psi
Stnd Dev Btwn Labs	16.19 psi	19.37 psi

Statistics based on 24 of 26 reporting participants

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

Summary Statistics in SI Units

Grand Means	1.4560 MPa	1.5400 MPa
Stnd Dev Btwn Labs	0.1116 MPa	0.1300 MPa

Statistics based on 24 of 26 reporting participants

Samples B31-B32: Polyisoprene compound, batch #1 & K31-K32: Polyisoprene compound, batch #1

Comments on Assigned Data Flags for Test #633

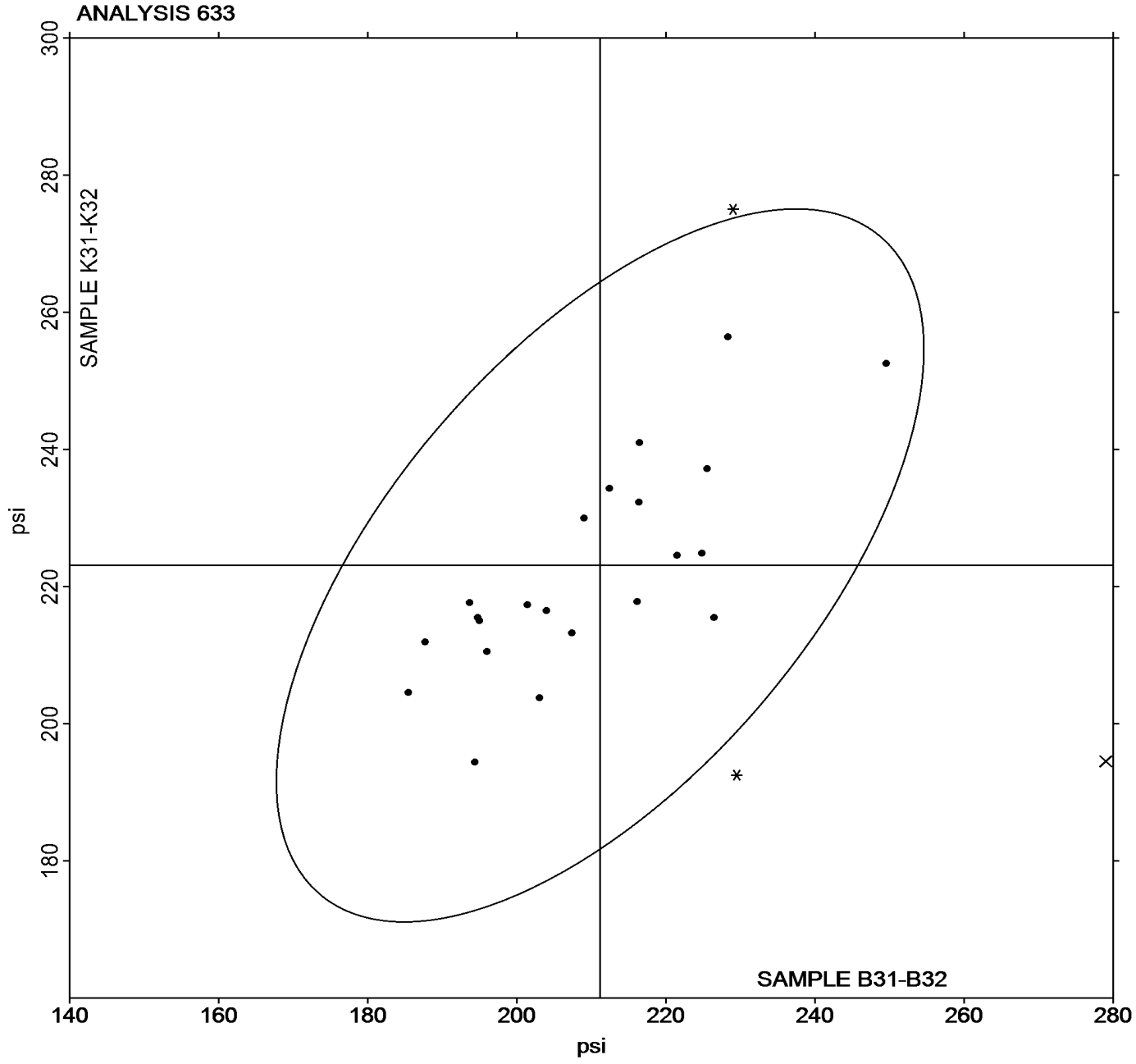
GWVB6J (X) - Data for sample group B31-B32 are high.

V2TADG (X) - Data for sample group K31-K32 are low.

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

Grand Mean Sample **B31-B32** = 211.17 psi

Grand Mean Sample **K31-K32** = 223.08 psi



WebCode	Data Flag	Sample O31 Lab Mean	Sample O31 Diff from Grand Mean	Sample O31 CPV	Sample O32 Lab Mean	Sample O32 Diff from Grand Mean	Sample O32 CPV
3GNUZX		31.00	6.26	0.93	32.67	8.29	1.20
3T446W		25.33	0.59	0.09	26.33	1.96	0.28
42RDPB		23.67	-1.08	-0.16	23.33	-1.04	-0.15
48VFRQ		24.23	-0.51	-0.08	23.70	-0.67	-0.10
4KKGBH		30.93	6.19	0.92	31.10	6.73	0.98
6QN6KT		32.00	7.26	1.08	21.67	-2.71	-0.39
7FKMPL		25.33	0.59	0.09	29.00	4.63	0.67
8MZVKW		26.48	1.74	0.26	25.53	1.15	0.17
8XB22C		24.34	-0.40	-0.06	21.52	-2.85	-0.41
9L6KBE		31.00	6.26	0.93	25.00	0.63	0.09
9LWPG8		22.00	-2.74	-0.41	22.67	-1.71	-0.25
9VLVGE		20.47	-4.28	-0.64	17.83	-6.54	-0.95
ATUF7A		18.67	-6.08	-0.90	20.33	-4.04	-0.59
B4RU6R		22.44	-2.30	-0.34	20.55	-3.82	-0.55
BQ6ALD		27.17	2.42	0.36	33.73	9.36	1.36
BWXPBQ		21.26	-3.48	-0.52	23.61	-0.77	-0.11
D2TWL6	*	6.15	-18.59	-2.76	4.48	-19.89	-2.89
EWH32Y		25.00	0.26	0.04	23.00	-1.37	-0.20
EX8MV4		20.00	-4.74	-0.70	20.33	-4.04	-0.59
GWVB6J		37.11	12.36	1.84	27.47	3.09	0.45
JGEW3C		18.00	-6.74	-1.00	20.00	-4.37	-0.64
LGHV7Y		36.23	11.49	1.71	33.57	9.19	1.34
LKPMJQ		17.00	-7.74	-1.15	22.67	-1.71	-0.25
LPJJ7W		22.60	-2.14	-0.32	22.23	-2.14	-0.31
PA9FPJ		21.70	-3.04	-0.45	23.23	-1.14	-0.17
R9BF8X	*	41.52	16.77	2.49	45.47	21.09	3.06
RNFTZU		24.67	-0.08	-0.01	33.50	9.13	1.33
RXR4VL		23.00	-1.74	-0.26	16.67	-7.71	-1.12
RYJTRG		26.33	1.59	0.24	23.00	-1.37	-0.20
TQ6VKU		26.26	1.52	0.23	23.05	-1.32	-0.19
TTAWLL		15.70	-9.04	-1.34	20.58	-3.80	-0.55
VPKX8K		24.17	-0.58	-0.09	22.13	-2.24	-0.33
W799UM	M	24.71	-0.03	0.00	No data reported for this sample		

Summary Statistics		
Grand Means		
	24.743 % Compression	24.374 % Compression
Stnd Dev Btwn Labs		
	6.731 % Compression	6.885 % Compression
		Statistics based on 32 of 33 reporting participants

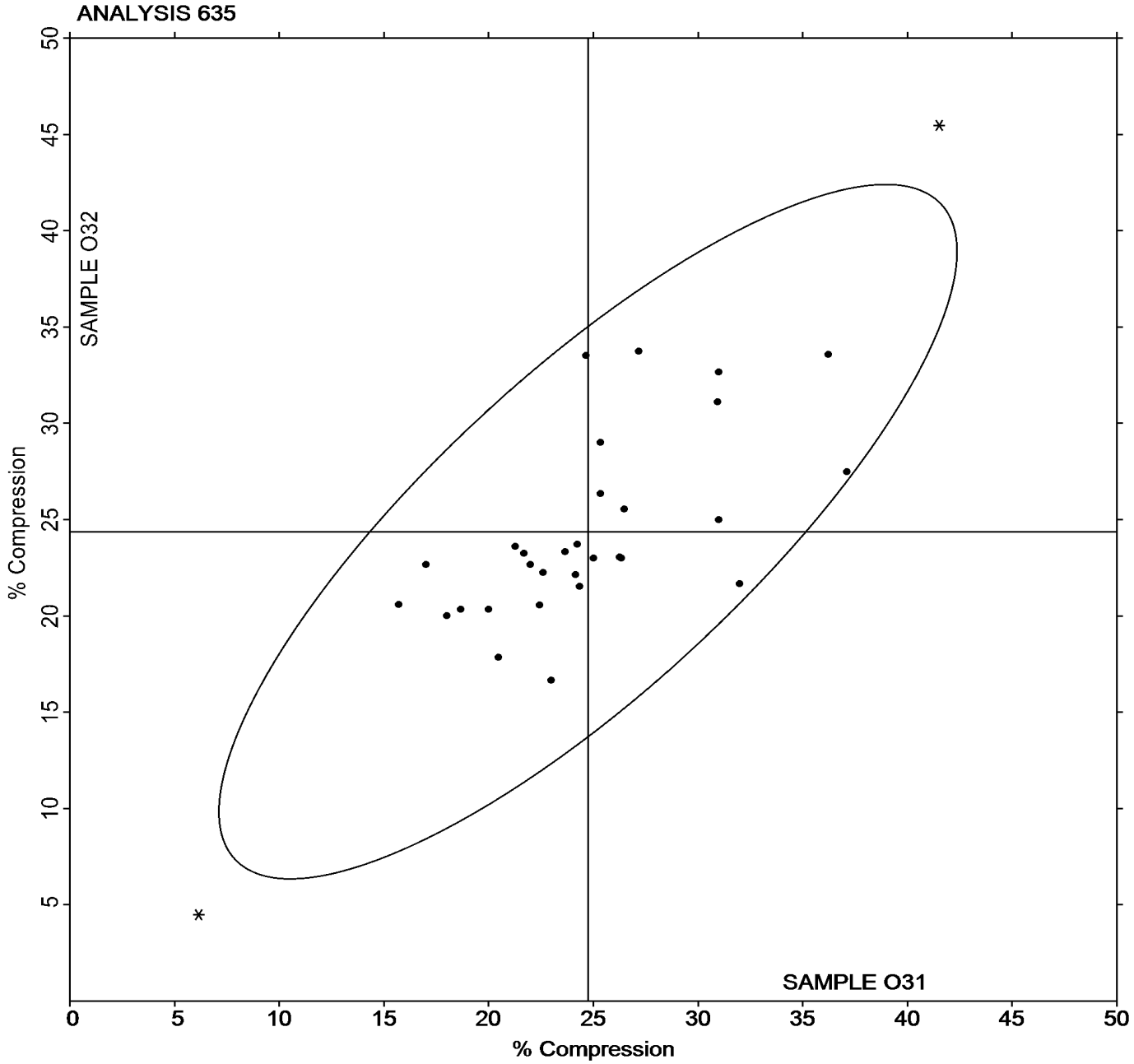
Samples O31: EPDM compound, batch #1 & O32: EPDM compound, batch #1

Comments on Assigned Data Flags for Test #635

W799UM (M) - Participant did not submit data for sample O32.

Grand Mean Sample **O31** = 24.743 % Compression

Grand Mean Sample = 24.374 % Compression



O-Ring Tensile Strength at Break (psi)

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		2,363.2	-30.6	-0.48	2,333.8	-46.9	-0.79
6QN6KT		2,428.0	34.1	0.54	2,403.9	23.2	0.39
8MZVKW		2,318.4	-75.4	-1.19	2,304.6	-76.1	-1.28
ATUF7A		2,447.2	53.4	0.84	2,356.0	-24.7	-0.42
EWH32Y		2,392.4	-1.4	-0.02	2,437.8	57.1	0.96
EX8MV4		2,306.8	-87.0	-1.38	2,362.6	-18.1	-0.31
H3WHNT		2,378.6	-15.2	-0.24	2,420.4	39.7	0.67
LKPMJQ		2,413.0	19.2	0.30	2,332.2	-48.5	-0.82
TQ6VKU		2,522.2	128.4	2.03	2,500.4	119.7	2.02
TTAWLL		2,368.3	-25.5	-0.40	2,355.4	-25.3	-0.43

Summary Statistics

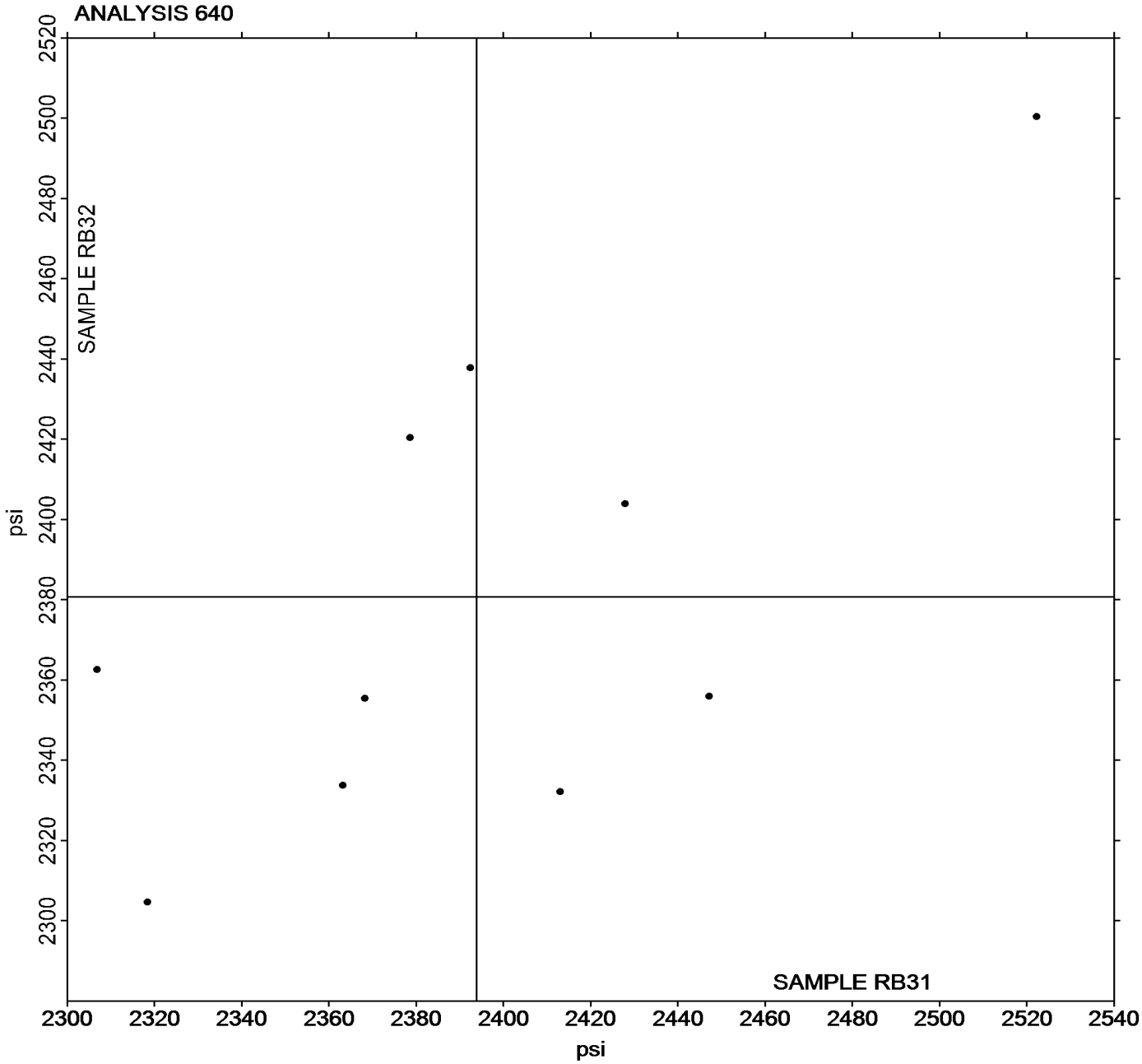
	Sample RB31	Sample RB32
Grand Means	2,393.80 psi	2,380.71 psi
Stnd Dev Btwn Labs	63.20 psi	59.28 psi

Statistics based on 10 of 10 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 2,393.80 psi

Grand Mean Sample **RB32** = 2,380.71 psi



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

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		444.0	17.8	0.55	437.8	17.1	0.57
6QN6KT		461.6	35.4	1.09	462.0	41.3	1.39
8MZVKW		417.8	-8.4	-0.26	417.4	-3.3	-0.11
ATUF7A		388.2	-38.0	-1.17	369.4	-51.3	-1.73
EWH32Y		410.2	-16.0	-0.50	409.6	-11.1	-0.37
EX8MV4		361.4	-64.8	-2.00	376.4	-44.3	-1.49
H3WHNT		431.2	5.0	0.15	443.6	22.9	0.77
LKPMJQ		442.6	16.4	0.51	418.8	-1.9	-0.06
TQ6VKU		462.6	36.4	1.12	446.8	26.1	0.88
TTAWLL		442.6	16.4	0.51	425.4	4.7	0.16

Summary Statistics

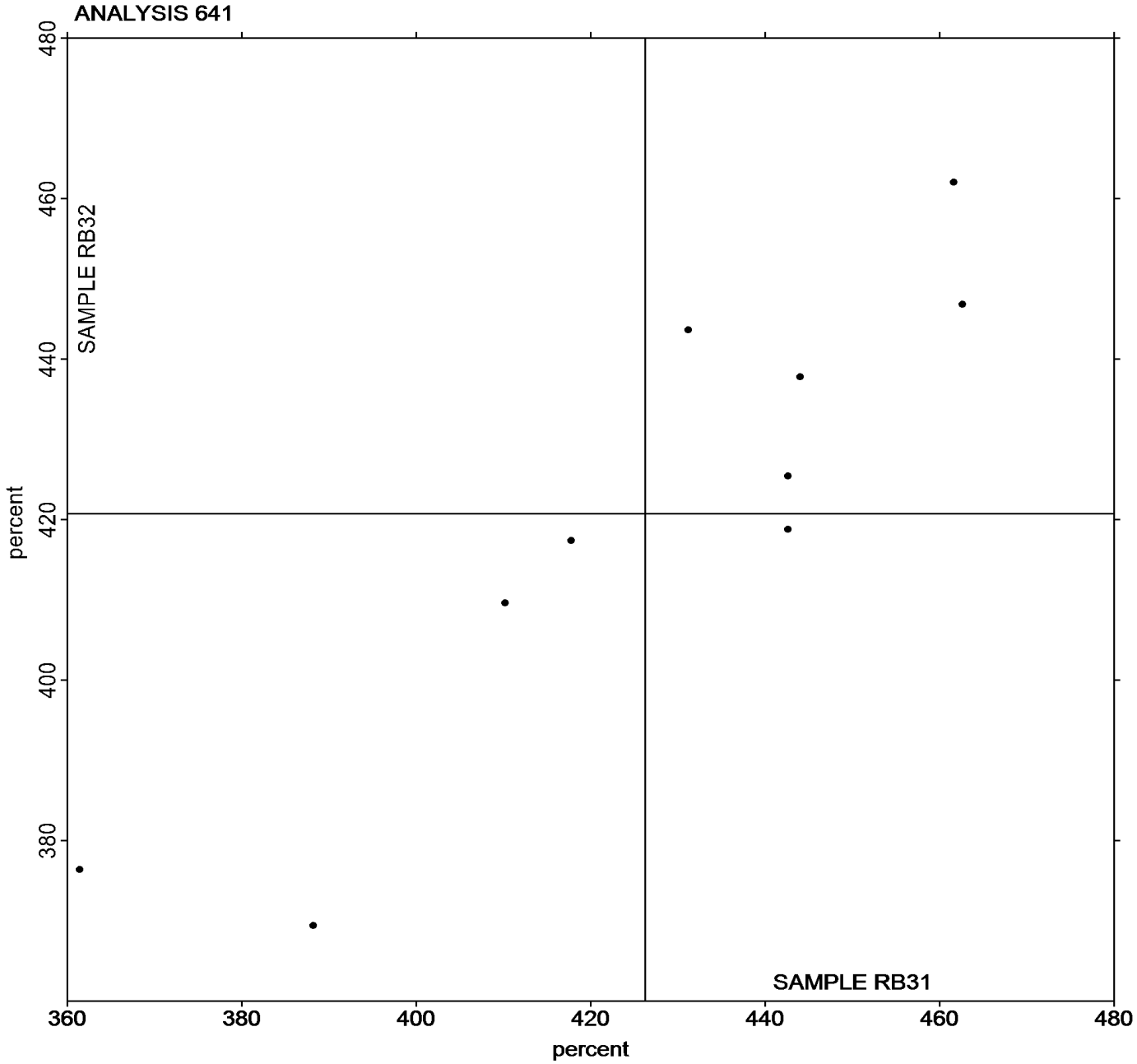
	Sample RB31	Sample RB32
Grand Means	426.22 percent	420.72 percent
Stnd Dev Btwn Labs	32.37 percent	29.74 percent

Statistics based on 10 of 10 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 426.22 percent

Grand Mean Sample **RB32** = 420.72 percent



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

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		387.2	-91.1	-1.14	379.0	-105.1	-1.20
6QN6KT		346.6	-131.6	-1.65	342.6	-141.5	-1.62
8MZVKW		518.2	39.9	0.50	516.8	32.7	0.37
ATUF7A		560.8	82.5	1.04	590.0	105.9	1.21
EWH32Y		587.2	108.9	1.37	604.4	120.3	1.38
EX8MV4		565.2	86.9	1.09	566.8	82.7	0.95
H3WHNT		451.6	-26.7	-0.33	449.2	-34.9	-0.40
LKPMJQ		455.8	-22.5	-0.28	456.4	-27.7	-0.32
TQ6VKU		481.4	3.1	0.04	493.8	9.7	0.11
TTAWLL		428.8	-49.5	-0.62	441.9	-42.2	-0.48

Summary Statistics

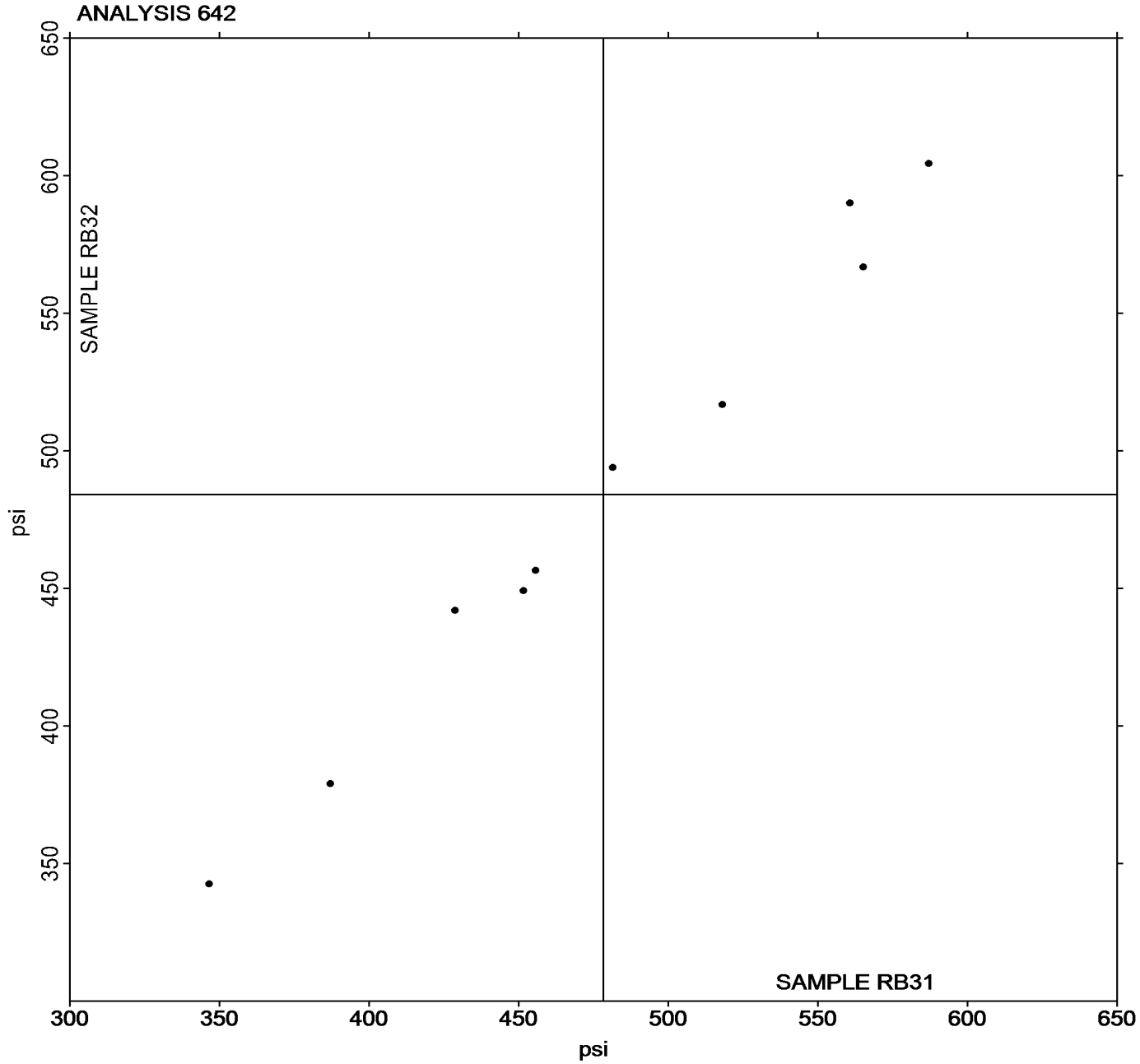
	Sample RB31	Sample RB32
Grand Means	478.28 psi	484.09 psi
Stnd Dev Btwn Labs	79.67 psi	87.26 psi

Statistics based on 10 of 10 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 478.28 psi

Grand Mean Sample **RB32** = 484.09 psi



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

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		70.34	3.02	0.90	70.58	3.00	0.96
6QN6KT		67.60	0.28	0.08	67.98	0.40	0.13
8MZVKW		68.64	1.32	0.39	69.06	1.48	0.48
A9BMK2		67.60	0.28	0.08	67.60	0.02	0.01
ATUF7A		70.20	2.88	0.86	70.40	2.82	0.91
EWH32Y		59.20	-8.12	-2.41	60.00	-7.58	-2.44
EX8MV4		70.76	3.44	1.02	69.86	2.28	0.73
H3WHNT		65.74	-1.58	-0.47	65.60	-1.98	-0.64
LKPMJQ		65.80	-1.52	-0.45	66.60	-0.98	-0.31
TQ6VKU		67.34	0.02	0.01	68.10	0.52	0.17

Summary Statistics

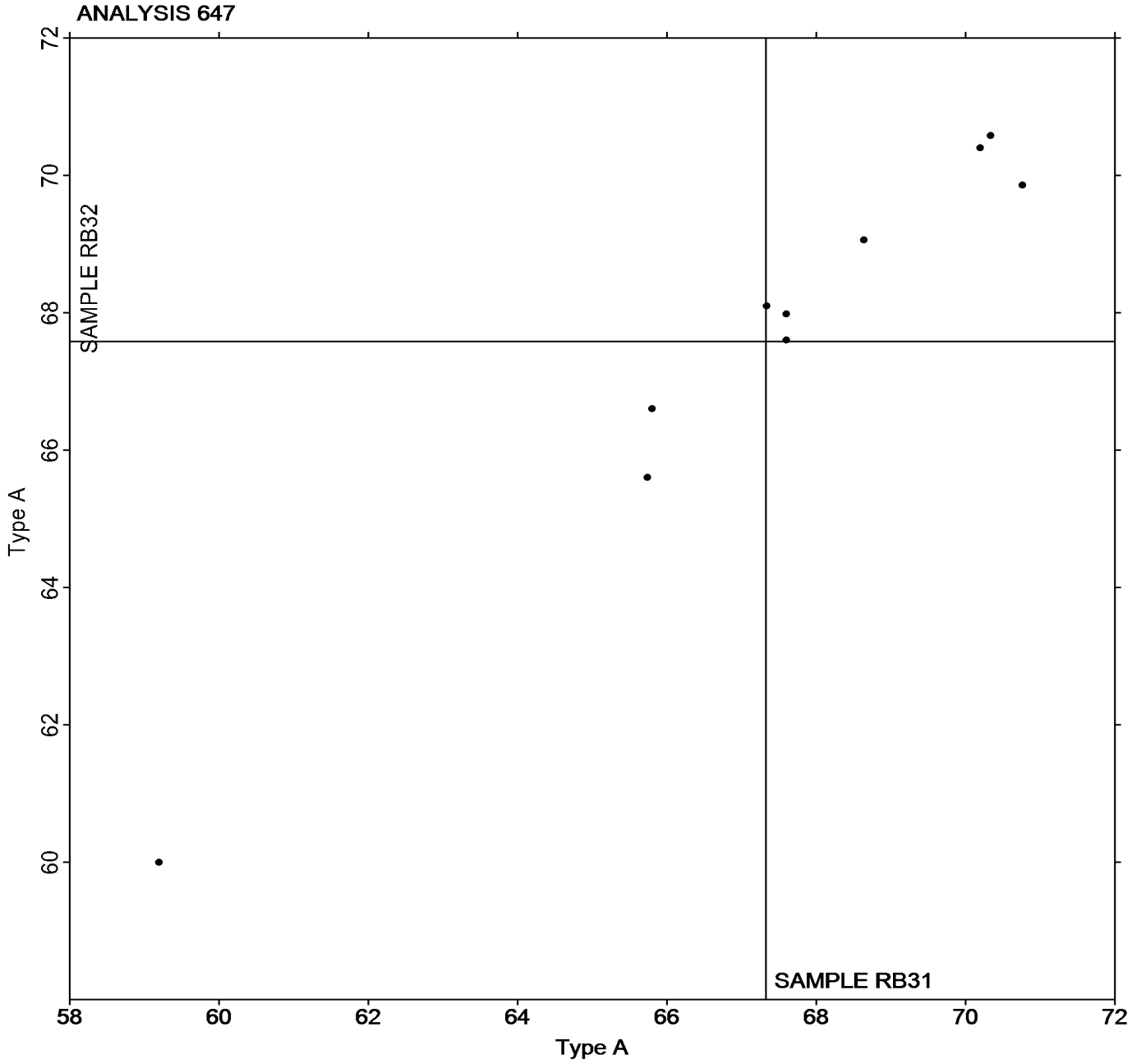
	Sample RB31	Sample RB32
Grand Means	67.322 Type A	67.578 Type A
Stnd Dev Btwn Labs	3.365 Type A	3.111 Type A

Statistics based on 10 of 10 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 67.322 Type A

Grand Mean Sample **RB32** = 67.578 Type A



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

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		75.20	-0.97	-0.73	74.96	-1.32	-0.94
8MZVKW		76.32	0.15	0.11	76.32	0.04	0.03
ATUF7A		77.12	0.95	0.71	77.20	0.92	0.65
EWH32Y		73.34	-2.83	-2.13	73.36	-2.92	-2.07
EX8MV4		76.56	0.39	0.29	76.86	0.58	0.41
LKPMJQ		77.52	1.35	1.01	77.32	1.04	0.74
TQ6VKU		76.44	0.27	0.20	77.16	0.88	0.63
TTAWLL		76.88	0.71	0.53	77.04	0.76	0.54

Summary Statistics

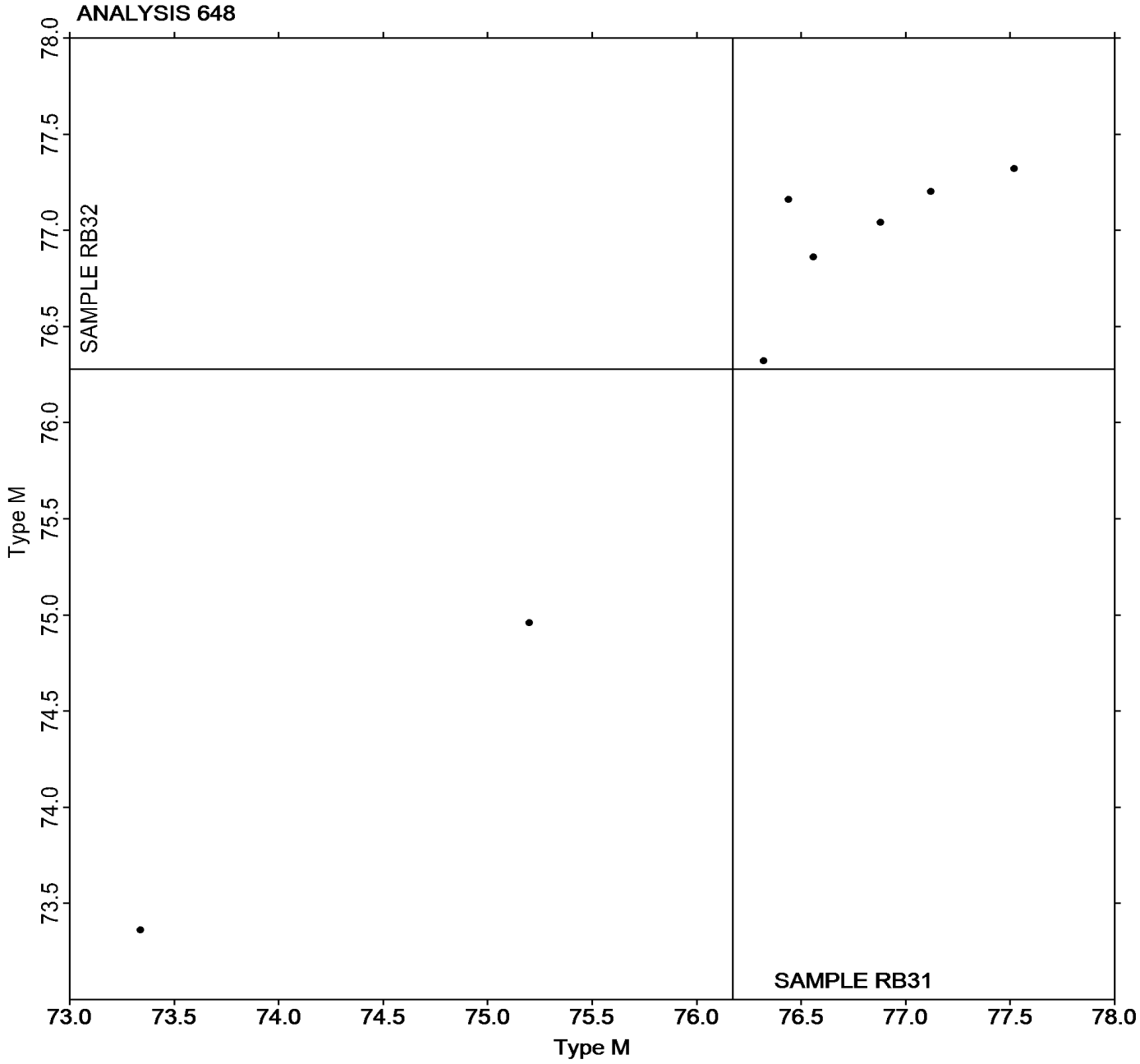
	Sample RB31	Sample RB32
Grand Means	76.173 Type M	76.278 Type M
Stnd Dev Btwn Labs	1.332 Type M	1.408 Type M

Statistics based on 8 of 8 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 76.173 Type M

Grand Mean Sample **RB32** = 76.278 Type M



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

WebCode	Data Flag	Sample RB31 Lab Mean	Sample RB31 Diff from Grand Mean	Sample RB31 CPV	Sample RB32 Lab Mean	Sample RB32 Diff from Grand Mean	Sample RB32 CPV
4KKGBH		1.208	-0.005	-1.02	1.208	-0.006	-1.18
6QN6KT		1.219	0.006	1.33	1.216	0.002	0.48
8MZVKW		1.213	0.000	-0.08	1.213	-0.001	-0.19
A9BMK2		1.214	0.001	0.25	1.216	0.002	0.43
ATUF7A		1.210	-0.003	-0.69	1.213	-0.001	-0.20
EWH32Y		1.206	-0.007	-1.40	1.204	-0.010	-2.06
EX8MV4		1.208	-0.005	-1.08	1.212	-0.001	-0.31
H3WHNT		1.218	0.005	1.00	1.219	0.005	1.15
LKPMJQ		1.219	0.006	1.33	1.221	0.007	1.49
TQ6VKU		1.217	0.004	0.77	1.216	0.002	0.45
TTAWLL		1.211	-0.002	-0.41	1.213	0.000	-0.07

Summary Statistics

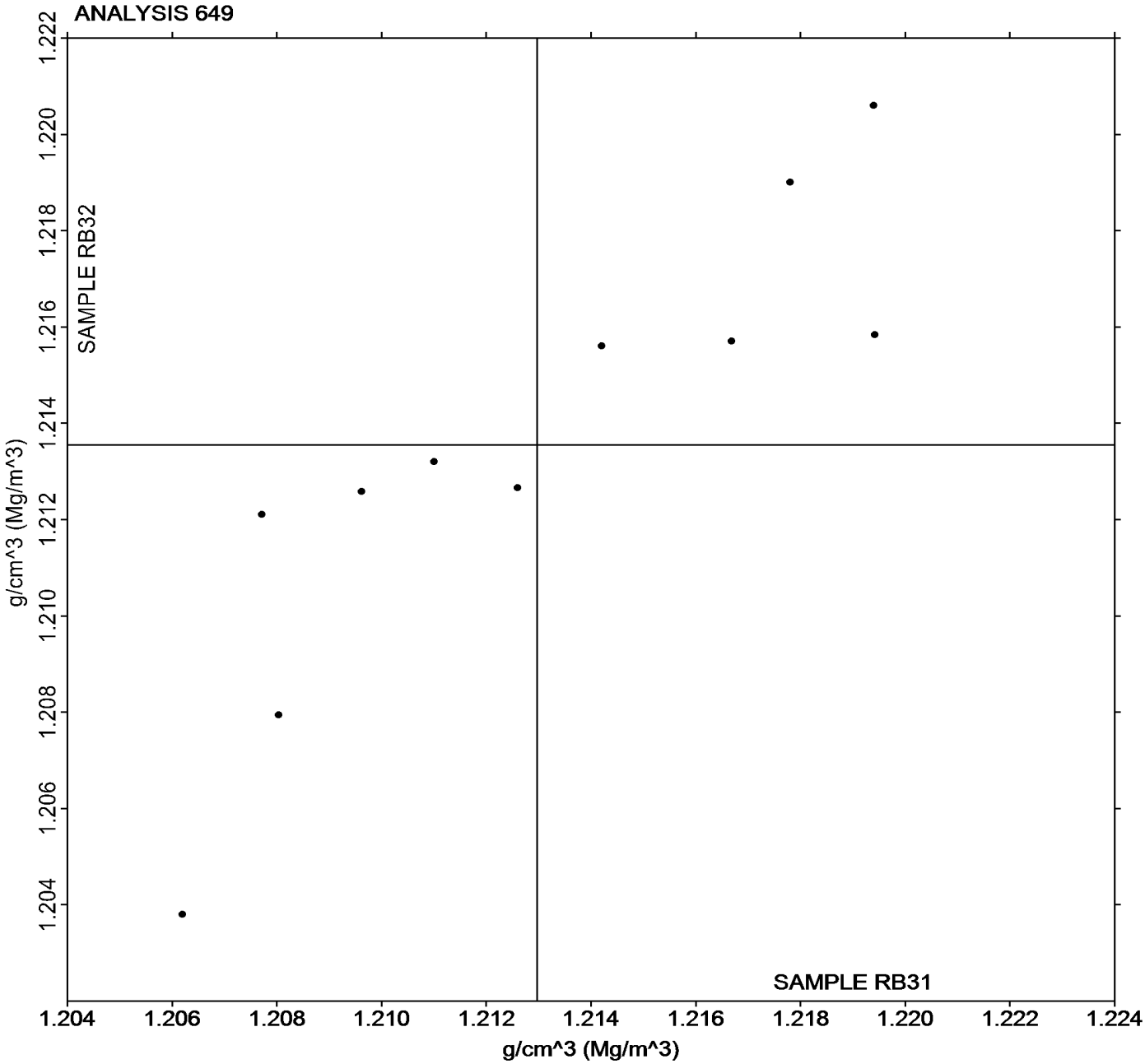
	Sample RB31	Sample RB32
Grand Means	1.2130 g/cm^3 (Mg/m^3)	1.2135 g/cm^3 (Mg/m^3)
Stnd Dev Btwn Labs	0.0048 g/cm^3 (Mg/m^3)	0.0047 g/cm^3 (Mg/m^3)

Statistics based on 11 of 11 reporting participants

Samples RB31: Nitrile O-Ring & RB32: Nitrile O-Ring

Grand Mean Sample **RB31** = 1.2130 g/cm ^ 3 (Mg/m ^ 3)

Grand Mean Sample **RB32** = 1.2135 g/cm ^ 3 (Mg/m ^ 3)



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

WebCode	Data Flag	Sample RB33 Lab Mean	Sample RB33 Diff from Grand Mean	Sample RB33 CPV	Sample RB34 Lab Mean	Sample RB34 Diff from Grand Mean	Sample RB34 CPV
4KKGBH		9.800	0.255	0.25	8.800	-0.220	-0.21
6QN6KT		11.267	1.721	1.70	11.233	2.214	2.09
7DQKJR		10.630	1.085	1.07	8.670	-0.350	-0.33
8MZVKW		9.800	0.255	0.25	9.310	0.290	0.27
ATUF7A		8.000	-1.545	-1.52	8.667	-0.353	-0.33
EWH32Y		10.333	0.788	0.78	10.000	0.980	0.93
EX8MV4		9.333	-0.212	-0.21	8.333	-0.686	-0.65
KWX83J		8.733	-0.812	-0.80	8.733	-0.286	-0.27
LKPMJQ		8.333	-1.212	-1.20	8.667	-0.353	-0.33
TQ6VKU		8.760	-0.785	-0.77	9.733	0.714	0.67
TTAWLL		10.010	0.465	0.46	7.070	-1.950	-1.84

Summary Statistics

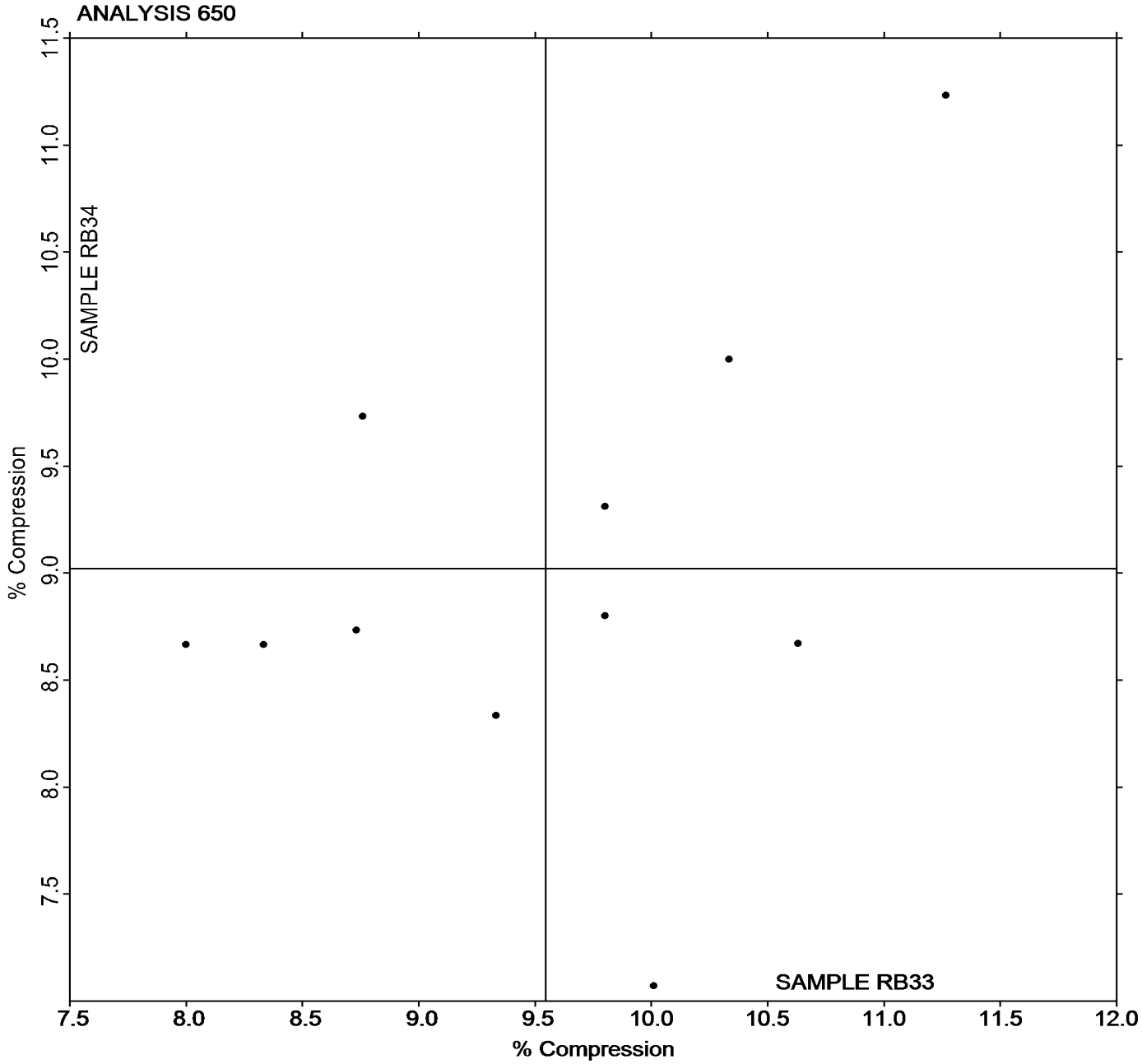
	Sample RB33	Sample RB34
Grand Means	9.5455 % Compression	9.0197 % Compression
Stnd Dev Btwn Labs	1.0141 % Compression	1.0597 % Compression

Statistics based on 11 of 11 reporting participants

Samples RB33: Nitrile O-Ring & RB34: Nitrile O-Ring

Grand Mean Sample **RB33** = 9.5455 % Compression

Grand Mean Sample **RB34** = 9.0197 % Compression



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

WebCode	Data Flag	Sample T31-T32 Lab Mean	Diff from Grand Mean	CPV	Sample T33-T34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
2DY8EJ		46.80	-0.25	-0.33	52.58	-0.52	-0.46	MR
3T446W		46.42	-0.63	-0.85	51.00	-2.10	-1.86	MR
48VFRQ		46.77	-0.28	-0.37	52.69	-0.42	-0.37	MR
4KJ7BN		47.38	0.33	0.45	53.63	0.52	0.46	MV
4Y2AYP		47.15	0.10	0.14	53.37	0.26	0.23	MR
6QN6KT		47.87	0.82	1.10	54.08	0.98	0.86	ML
6TDB6P		45.47	-1.57	-2.11	50.74	-2.36	-2.09	MV
74T2JR		47.50	0.45	0.61	53.65	0.55	0.48	MR
8XB22C		47.24	0.20	0.26	53.07	-0.03	-0.03	MR
BKFR6G		47.86	0.82	1.10	53.79	0.68	0.60	XX
EY89LV		47.45	0.40	0.54	53.48	0.38	0.33	MR
F224JH		46.65	-0.40	-0.53	52.87	-0.24	-0.21	MR
F4QA4E		48.12	1.07	1.44	53.35	0.25	0.22	MR
F8FGNC		48.30	1.25	1.68	54.08	0.98	0.86	MR
FKZK3Z		47.32	0.28	0.37	54.82	1.71	1.51	MR
GWVB6J	X	43.68	-3.36	-4.51	49.60	-3.50	-3.09	MP
HEUJ64		45.92	-1.13	-1.52	51.55	-1.56	-1.37	MR
JGEW3C		46.03	-1.01	-1.36	52.02	-1.09	-0.96	MM
JH7E38	*	47.89	0.84	1.13	55.63	2.52	2.23	TA
KCBM3U		46.83	-0.21	-0.29	52.93	-0.17	-0.15	MR
KWX83J		47.85	0.80	1.08	54.78	1.68	1.48	MV
LF7U4H		46.63	-0.42	-0.56	52.96	-0.14	-0.13	MV
LHFLEJ		46.79	-0.25	-0.34	52.31	-0.79	-0.70	MR
LHZFYU		46.48	-0.56	-0.76	52.83	-0.27	-0.24	MR
LKPMJQ		46.58	-0.46	-0.62	52.42	-0.69	-0.61	MR
LPJJ7W		47.59	0.54	0.72	54.29	1.19	1.05	MR
MTDXBX		46.87	-0.18	-0.24	52.92	-0.19	-0.17	MR
MU63FP		47.15	0.10	0.14	53.23	0.13	0.11	MR
NRV8H6		45.44	-1.61	-2.16	51.26	-1.85	-1.63	MV
PFVHX4		48.17	1.12	1.50	54.59	1.48	1.31	MV
TQ6VKU		47.23	0.19	0.25	53.07	-0.04	-0.03	MR
ZM3AQ4		46.70	-0.35	-0.47	52.25	-0.85	-0.75	MR

Summary Statistics		
Grand Means	47.047 ML 1 + 4	53.104 ML 1 + 4
Stnd Dev Btwn Labs	0.745 ML 1 + 4	1.132 ML 1 + 4
		Statistics based on 31 of 32 reporting participants

Samples T31-T32: SBR & T33-T34: Butyl

Comments on Assigned Data Flags for Test #660

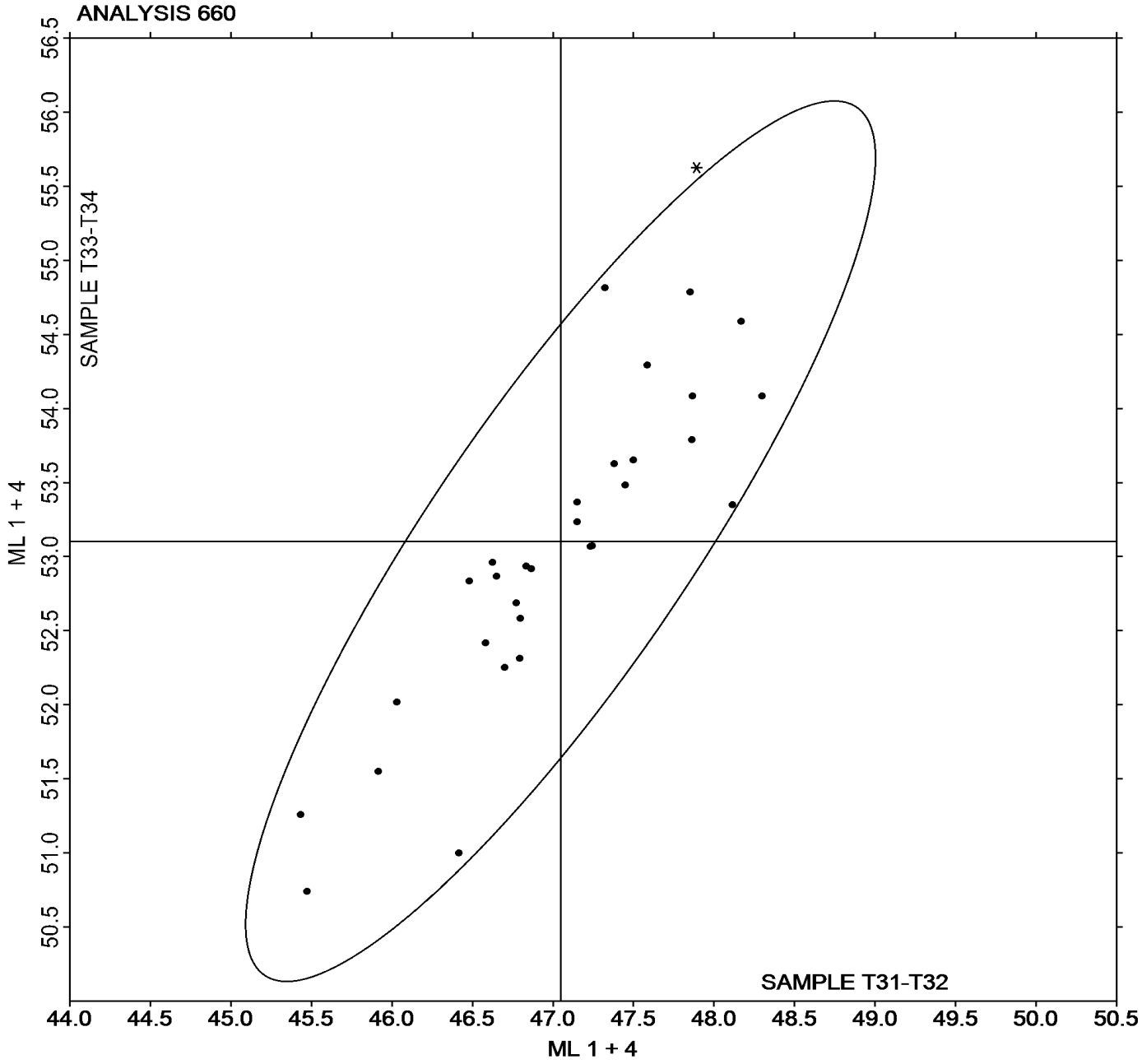
GWVB6J (X) - Data for all samples are low.

Key to Instrument Codes Reported by Participants

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
MV	MonTech	TA	TA Instruments (any model)
XX	Instrument make/model not specified by lab		

Grand Mean Sample **T31-T32** = 47.047 ML 1 + 4

Grand Mean Sample **T33-T34** = 53.104 ML 1 + 4



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

WebCode	Data Flag	Sample T31-T32 Lab Mean	Sample T31-T32 Diff from Grand Mean	Sample T31-T32 CPV	Sample T33-T34 Lab Mean	Sample T33-T34 Diff from Grand Mean	Sample T33-T34 CPV	Instr Code
2DY8EJ		46.80	-0.16	-0.15	50.15	-0.46	-0.35	MR
3T446W		46.42	-0.54	-0.54	48.20	-2.41	-1.80	MR
48VFRQ		46.77	-0.18	-0.18	50.56	-0.05	-0.04	MR
4KJ7BN		47.38	0.43	0.42	51.10	0.49	0.37	MV
4Y2AYP		47.15	0.19	0.19	50.98	0.37	0.28	MR
6QN6KT		47.87	0.91	0.91	51.68	1.07	0.80	ML
6TDB6P		45.47	-1.48	-1.47	48.82	-1.79	-1.34	MV
74T2JR		47.50	0.54	0.54	52.97	2.35	1.76	MR
8XB22C		47.24	0.29	0.29	50.68	0.07	0.05	MR
BKFR6G		47.86	0.91	0.90	50.70	0.08	0.06	XX
EY89LV		47.45	0.49	0.49	51.00	0.39	0.29	MR
F4QA4E		48.12	1.16	1.16	50.70	0.09	0.07	MR
F8FGNC		48.30	1.34	1.34	51.60	0.99	0.74	MR
GWVB6J	*	43.68	-3.27	-3.26	46.67	-3.95	-2.95	MP
HEUJ64		45.92	-1.04	-1.03	49.34	-1.27	-0.95	MR
JGEW3C	*	46.03	-0.92	-0.92	51.88	1.26	0.94	MR
JH7E38		47.89	0.94	0.93	52.67	2.06	1.53	TA
KCBM3U		46.83	-0.12	-0.12	50.03	-0.58	-0.43	MR
KWX83J		47.85	0.90	0.89	51.90	1.29	0.96	MV
LF7U4H	X	46.63	-0.33	-0.33	36.57	-14.04	-10.49	MV
LHZFYU		46.48	-0.47	-0.47	50.28	-0.33	-0.25	MR
LKPMJQ		46.58	-0.37	-0.37	49.68	-0.93	-0.69	MR
LPJJ7W		47.59	0.63	0.63	51.87	1.26	0.94	MR
MTDXBX		46.87	-0.09	-0.09	50.78	0.17	0.13	MR
MU63FP		47.15	0.19	0.19	51.08	0.47	0.35	MR
NRV8H6		45.44	-1.52	-1.51	49.44	-1.17	-0.88	MV
PFVHX4		48.17	1.21	1.21	51.70	1.08	0.81	MV
TQ6VKU		47.23	0.28	0.28	50.82	0.20	0.15	MR
ZM3AQ4		46.70	-0.26	-0.25	49.87	-0.74	-0.55	MR

Summary Statistics

	Sample T31-T32	Sample T33-T34
Grand Means	46.955 ML 1 + 8	50.613 ML 1 + 8
Stnd Dev Btwn Labs	1.005 ML 1 + 8	1.339 ML 1 + 8

Statistics based on 28 of 29 reporting participants

Samples T31-T32: SBR & T33-T34: Butyl

Comments on Assigned Data Flags for Test #661

LF7U4H (X) - Extreme Data for sample group T33-T34.

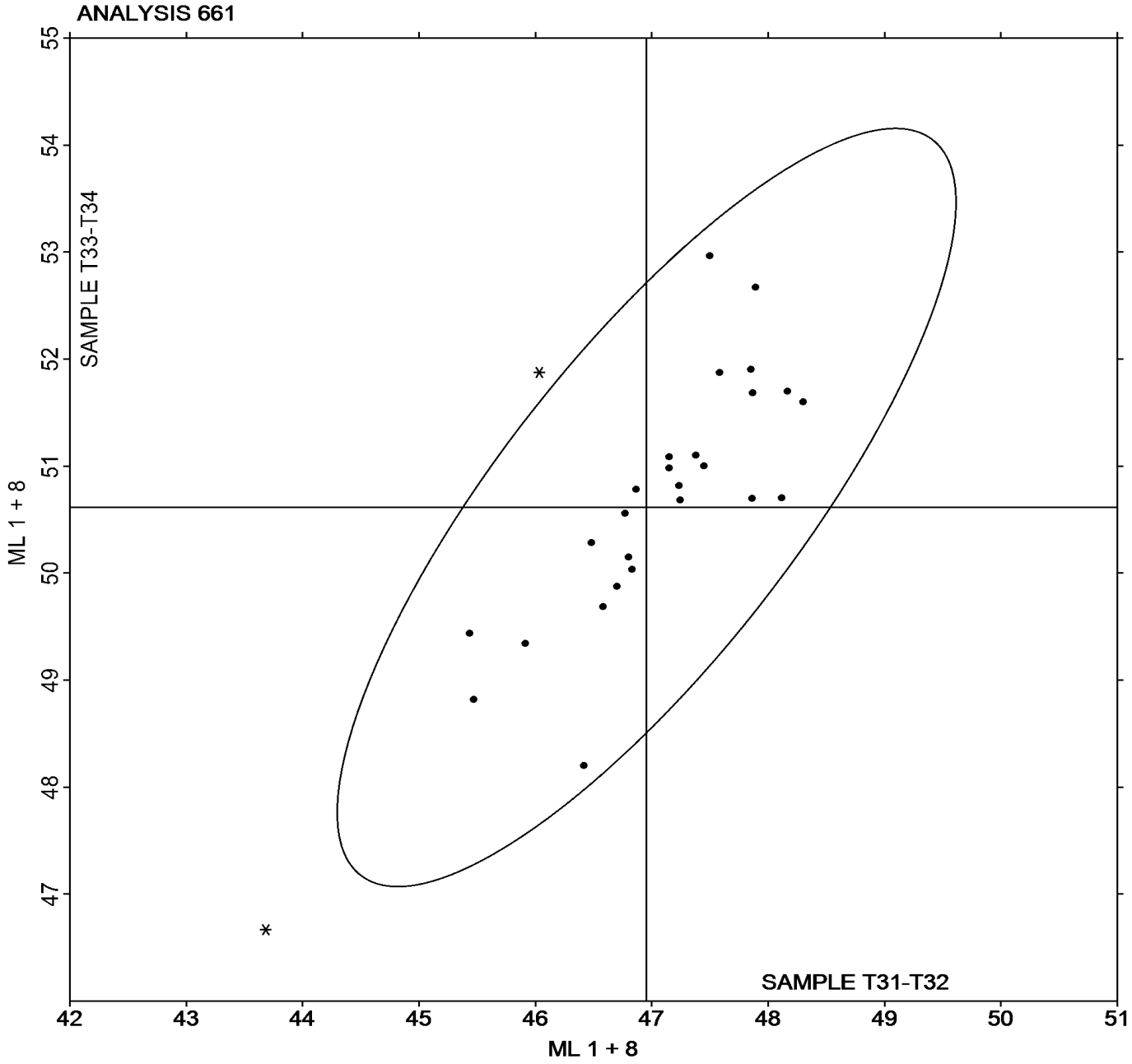
Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MP	Monsanto Compact Mooney Viscometer
MR	Alpha Technologies Model MV2000/MV2000E	MV	Montech
TA	TA Instruments (any model)	XX	Instrument make/model not specified by lab

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

Grand Mean Sample **T31-T32** = 46.955 ML 1 + 8

Grand Mean Sample **T33-T34** = 50.613 ML 1 + 8



Mooney Stress Relaxation: t80 (seconds)

WebCode	Data Flag	Sample T31-T32 Lab Mean	Sample T31-T32 Diff from Grand Mean	Sample T31-T32 CPV	Sample T33-T34 Lab Mean	Sample T33-T34 Diff from Grand Mean	Sample T33-T34 CPV	Instr Code
48VFRQ		11.17	-18.65	-0.24	7.55	-19.75	-0.25	MR
4KJ7BN		6.90	-22.91	-0.29	5.40	-21.90	-0.28	MV
6QN6KT		11.17	-18.65	-0.24	7.38	-19.92	-0.26	ML
6TDB6P		6.90	-22.91	-0.29	7.70	-19.60	-0.25	MV
BKFR6G		11.50	-18.31	-0.23	8.67	-18.63	-0.24	XX
EY89LV		12.12	-17.70	-0.23	7.73	-19.57	-0.25	MR
F4QA4E		9.91	-19.91	-0.26	6.83	-20.47	-0.26	MR
KCBM3U		11.78	-18.03	-0.23	7.45	-19.85	-0.26	MR
KWX83J		9.13	-20.68	-0.27	6.70	-20.60	-0.26	MV
LF7U4H	*	311.70	281.89	3.61	308.40	281.10	3.61	MV
LHFLEJ		7.20	-22.61	-0.29	7.40	-19.90	-0.26	MR
LHZFYU		10.89	-18.92	-0.24	7.39	-19.91	-0.26	MR
MTDXBX		11.20	-18.61	-0.24	7.63	-19.67	-0.25	MR
MU63FP		10.69	-19.12	-0.25	7.18	-20.12	-0.26	MR
PFVHX4		4.93	-24.88	-0.32	6.07	-21.23	-0.27	MV

Summary Statistics

	Sample T31-T32	Sample T33-T34
Grand Means	29.812 seconds	27.299 seconds
Stnd Dev Btwn Labs	78.013 seconds	77.768 seconds

Statistics based on 15 of 15 reporting participants

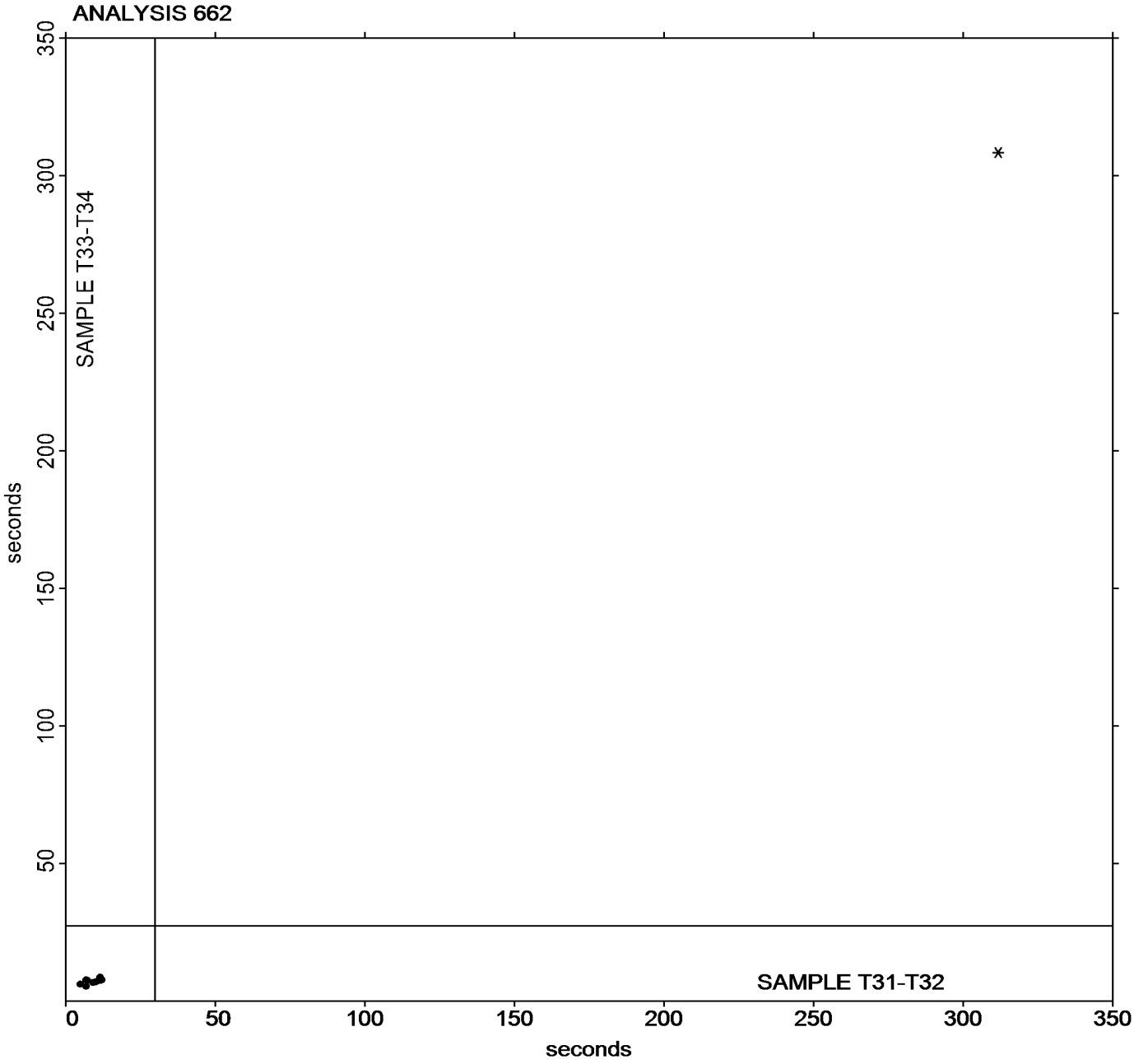
Samples T31-T32: SBR & T33-T34: Butyl

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	XX	Instrument make/model not specified by lab

Grand Mean Sample **T31-T32** = 29.812 seconds

Grand Mean Sample **T33-T34** = 27.299 seconds



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

Mooney Stress Relaxation: X30 (percent)

WebCode	Data Flag	Sample T31-T32 Lab Mean	Sample T31-T32 Diff from Grand Mean	Sample T31-T32 CPV	Sample T33-T34 Lab Mean	Sample T33-T34 Diff from Grand Mean	Sample T33-T34 CPV	Instr Code
48VFRQ		86.40	9.74	0.34	91.84	11.02	0.35	MR
4KJ7BN		90.39	13.72	0.47	95.44	14.62	0.47	MV
6QN6KT		86.47	9.81	0.34	92.10	11.28	0.36	ML
6TDB6P		89.40	12.74	0.44	91.75	10.92	0.35	MV
BKFR6G		86.17	9.51	0.33	91.35	10.52	0.34	XX
EY89LV		0.77	-75.89	-2.62	0.90	-79.92	-2.57	MR
F4QA4E		87.39	10.73	0.37	93.14	12.32	0.40	MR
KCBM3U		86.19	9.52	0.33	92.31	11.48	0.37	MR
KWX83J		87.76	11.10	0.38	93.11	12.28	0.40	MV
LF7U4H		86.07	9.41	0.33	91.08	10.26	0.33	MV
LHFLEJ		10.67	-65.99	-2.28	8.00	-72.82	-2.34	MR
LHZFYU		86.84	10.18	0.35	92.52	11.69	0.38	MR
MTDXBX		86.50	9.84	0.34	92.03	11.21	0.36	MR
MU63FP		86.68	10.01	0.35	92.34	11.52	0.37	MR
PFVHX4		92.24	15.58	0.54	94.46	13.63	0.44	MR

Summary Statistics

	Sample T31-T32	Sample T33-T34
Grand Means	76.661 percent	80.823 percent
Stnd Dev Btwn Labs	28.918 percent	31.057 percent

Statistics based on 15 of 15 reporting participants

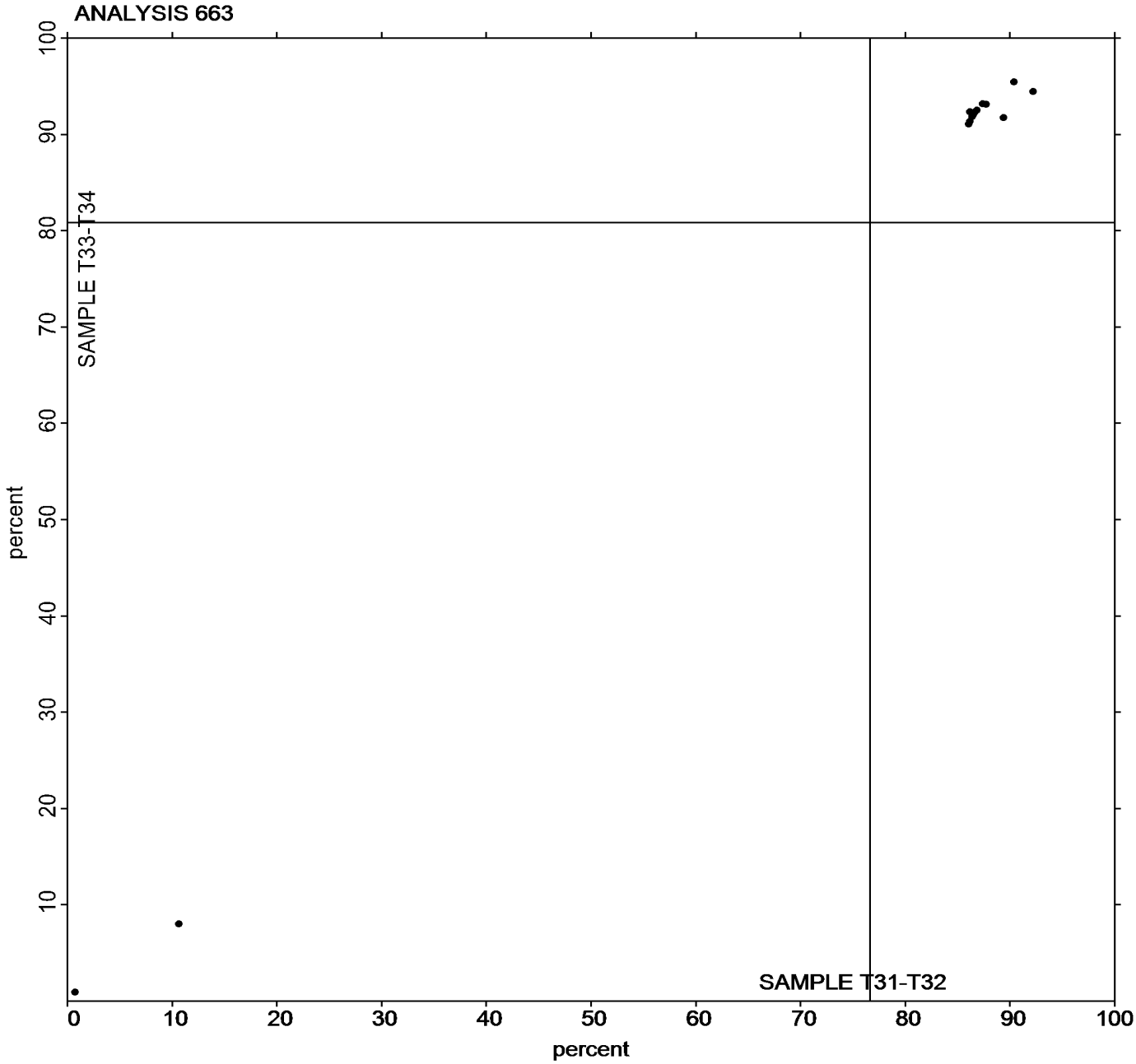
Samples T31-T32: SBR & T33-T34: Butyl

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	Montech	XX	Instrument make/model not specified by lab

Grand Mean Sample **T31-T32** = 76.661 percent

Grand Mean Sample **T33-T34** = 80.823 percent



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

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

WebCode	Data Flag	Sample T31-T32 Lab Mean	Diff from Grand Mean	CPV	Sample T33-T34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
48VFRQ		686.9	65.0	0.56	466.5	37.8	0.48	MR
4KJ7BN		469.4	-152.6	-1.31	247.5	-181.2	-2.30	MV
6QN6KT		694.7	72.8	0.62	458.9	30.1	0.38	ML
6TDB6P		486.4	-135.6	-1.16	449.5	20.8	0.26	MV
BKFR6G		715.9	93.9	0.80	523.2	94.5	1.20	XX
EY89LV		743.3	121.3	1.04	514.3	85.5	1.09	MR
KCBM3U		697.5	75.6	0.65	435.3	6.6	0.08	MR
KWX83J		623.3	1.4	0.01	392.1	-36.6	-0.46	MV
LF7U4H		697.7	75.8	0.65	518.3	89.6	1.14	MV
LHFLEJ		505.0	-116.9	-1.00	453.3	24.5	0.31	MR
LHZFYU		661.8	39.9	0.34	430.8	2.1	0.03	XX
MTDXBX		689.7	67.7	0.58	361.8	-66.9	-0.85	MR
MU63FP		675.8	53.9	0.46	440.8	12.1	0.15	MR
PFVHX4		359.9	-262.0	-2.24	309.8	-118.9	-1.51	MV

Summary Statistics

	Sample T31-T32	Sample T33-T34
Grand Means	621.95 M-s	428.73 M-s
Stnd Dev Btwn Labs	116.88 M-s	78.75 M-s

Statistics based on 14 of 14 reporting participants

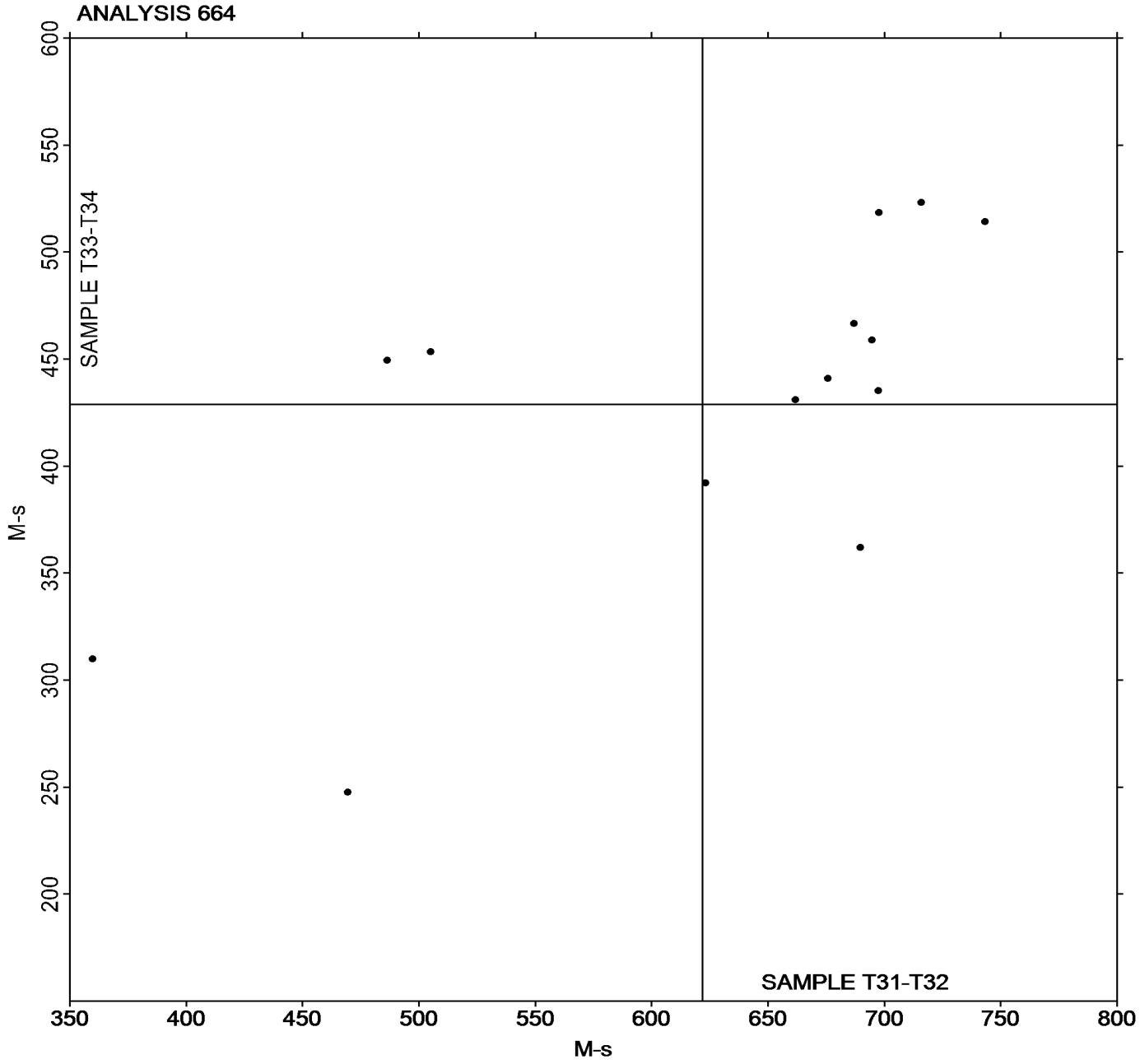
Samples T31-T32: SBR & T33-T34: Butyl

Key to Instrument Codes Reported by Participants

ML	Alpha Technologies/Monsanto model not specified	MR	Alpha Technologies Model MV2000/MV2000E
MV	MonTech	XX	Instrument make/model not specified by lab

Grand Mean Sample **T31-T32** = 621.95 M-s

Grand Mean Sample **T33-T34** = 428.73 M-s



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

WebCode	Data Flag	Sample X35-X36 Lab Mean	Diff from Grand Mean	CPV	Sample X37-X38 Lab Mean	Diff from Grand Mean	CPV	Instr Code
48VFRQ		2.365	-0.086	-0.79	2.382	-0.191	-0.80	MD
4KJ7BN		2.468	0.018	0.16	2.370	-0.203	-0.85	ME
4KKGBH		2.343	-0.107	-0.99	2.598	0.026	0.11	ME
6QN6KT		2.460	0.009	0.09	2.492	-0.081	-0.34	ME
6TDB6P	X	4.737	2.286	21.07	5.242	2.669	11.22	ME
74T2JR		2.330	-0.121	-1.11	2.345	-0.228	-0.96	MC
7FKMPL		2.342	-0.109	-1.00	2.461	-0.112	-0.47	MC
8XB22C		2.597	0.146	1.35	3.055	0.482	2.03	ME
B4RU6R		2.408	-0.042	-0.39	2.490	-0.083	-0.35	XX
BKFR6G		2.475	0.024	0.22	2.805	0.232	0.98	ME
C97RCE		2.507	0.056	0.52	2.448	-0.124	-0.52	XX
EY89LV		2.427	-0.024	-0.22	2.570	-0.003	-0.01	MC
F4QA4E	X	1.720	-0.731	-6.73	1.975	-0.598	-2.51	MC
FKZK3Z		2.478	0.028	0.25	2.603	0.031	0.13	MC
GWVB6J		2.535	0.084	0.78	2.512	-0.061	-0.26	ME
H7XQT3		2.580	0.129	1.19	2.603	0.031	0.13	MC
HEUJ64		2.365	-0.086	-0.79	2.450	-0.123	-0.52	MC
JGEW3C		2.690	0.239	2.21	2.777	0.204	0.86	XX
JP93WD		2.365	-0.086	-0.79	2.375	-0.198	-0.83	ME
KCBM3U		2.548	0.098	0.90	2.710	0.137	0.58	MC
KWX83J		2.358	-0.092	-0.85	2.628	0.056	0.23	XX
LF7U4H		2.190	-0.261	-2.40	2.093	-0.479	-2.02	MR
LGHV7Y		2.293	-0.157	-1.45	2.092	-0.481	-2.02	MC
LHFLEJ		2.468	0.018	0.16	2.868	0.296	1.24	MD
LKPMJQ		2.403	-0.047	-0.44	2.365	-0.208	-0.87	MC
LPJJ7W		2.577	0.126	1.16	2.628	0.056	0.23	MC
MU63FP		2.460	0.009	0.09	2.783	0.211	0.89	MC
N8QULC		2.437	-0.014	-0.13	2.838	0.266	1.12	MM
NRV8H6	X	1.668	-0.782	-7.21	1.770	-0.803	-3.37	MC
PFVHX4		2.435	-0.016	-0.14	2.660	0.087	0.37	MM
R68RLG		2.503	0.053	0.49	2.590	0.017	0.07	MD
RNFTZU		2.435	-0.016	-0.14	2.422	-0.151	-0.63	MC
T3AJDH		2.550	0.099	0.92	2.570	-0.003	-0.01	MR
TQ6VKU		2.442	-0.009	-0.08	2.595	0.022	0.09	MC
Y2ZM9F		2.353	-0.097	-0.90	2.457	-0.116	-0.49	ME
ZM3AQ4	*	2.685	0.234	2.16	3.262	0.689	2.90	MC

Summary Statistics		
Grand Means	2.4507 minutes	2.5727 minutes
Stnd Dev Btwn Labs	0.1085 minutes	0.2379 minutes

Statistics based on 33 of 36 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #684

6TDB6P (X) - Extreme Data.

F4QA4E (X) - Data for sample group X35-X36 are low.

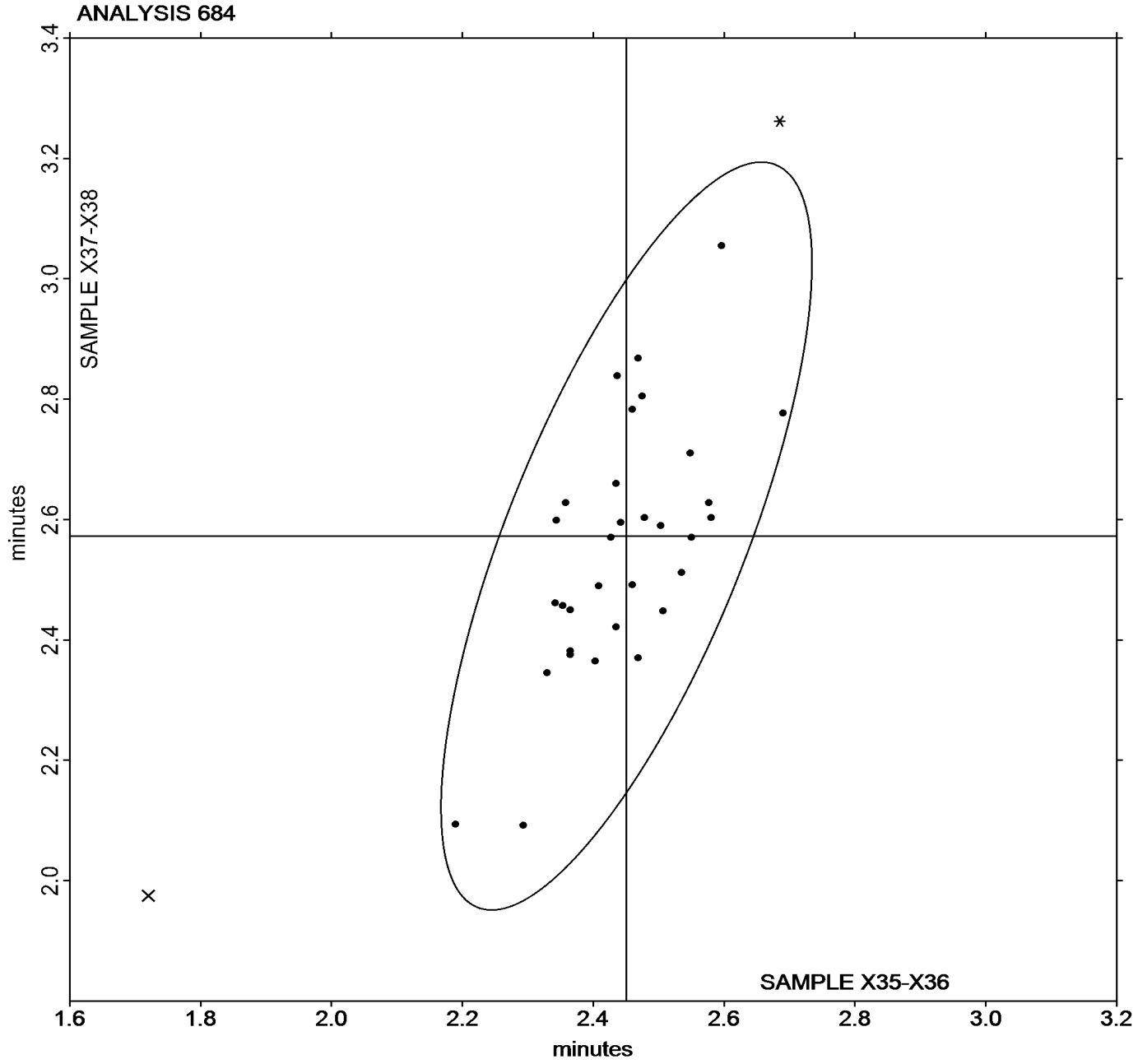
NRV8H6 (X) - Data for all samples are low. Inconsistent within the determinations of sample group X35-X36.

Key to Instrument Codes Reported by Participants

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

Grand Mean Sample **X35-X36** = 2.4507 minutes

Grand Mean Sample **X37-X38** = 2.5727 minutes



WebCode	Data Flag	Sample X35-X36 Lab Mean	Diff from Grand Mean	CPV	Sample X37-X38 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3T446W	X	1.625	-0.526	-3.53	2.360	-1.442	-6.25	MR
48VFRQ		2.145	-0.006	-0.04	3.717	-0.085	-0.37	MD
4KJ7BN		2.210	0.059	0.40	3.987	0.185	0.80	ME
4KKGBH		1.950	-0.201	-1.35	3.660	-0.142	-0.62	ME
6QN6KT		1.955	-0.196	-1.31	3.573	-0.229	-0.99	ME
74T2JR		2.145	-0.006	-0.04	3.787	-0.015	-0.07	MC
7FKMPL		2.047	-0.103	-0.69	3.686	-0.116	-0.50	MC
8XB22C		2.213	0.063	0.42	3.897	0.095	0.41	ME
B4RU6R		2.138	-0.012	-0.08	3.770	-0.032	-0.14	MR
BKFR6G		2.242	0.091	0.61	3.970	0.168	0.73	ME
C97RCE		2.118	-0.032	-0.22	3.755	-0.047	-0.20	XX
EY89LV		2.067	-0.084	-0.56	3.677	-0.125	-0.54	MC
F4QA4E	X	1.593	-0.557	-3.74	2.622	-1.180	-5.12	MC
FKZK3Z		2.033	-0.117	-0.79	3.680	-0.122	-0.53	MC
GWVB6J		2.407	0.256	1.72	4.268	0.466	2.02	ME
H7XQT3		2.213	0.063	0.42	3.758	-0.044	-0.19	MC
HEUJ64		2.108	-0.042	-0.28	3.755	-0.047	-0.20	MC
JGEW3C	X	2.542	0.391	2.63	3.603	-0.199	-0.86	XX
JP93WD		2.165	0.014	0.10	3.770	-0.032	-0.14	ME
KCBM3U		2.298	0.148	0.99	3.967	0.165	0.71	MC
KWX83J		2.042	-0.109	-0.73	3.582	-0.220	-0.96	XX
LF7U4H		1.955	-0.196	-1.31	3.633	-0.169	-0.73	MR
LGHV7Y	*	1.779	-0.372	-2.49	3.198	-0.605	-2.62	MC
LHFLEJ		2.085	-0.066	-0.44	3.727	-0.075	-0.33	MD
LHZFYU		2.033	-0.117	-0.79	3.467	-0.335	-1.45	MC
LKPMJQ		2.210	0.059	0.40	3.790	-0.012	-0.05	MC
LPJJ7W		2.353	0.203	1.36	4.105	0.303	1.31	MC
MU63FP		2.223	0.073	0.49	3.820	0.018	0.08	MC
N8QULC		2.390	0.239	1.61	4.217	0.415	1.80	MM
NRV8H6	X	2.972	0.821	5.51	2.945	-0.857	-3.72	MC
P8P2LH	X	2.317	0.166	1.12	3.540	-0.262	-1.14	MC
PFVHX4		2.057	-0.094	-0.63	3.665	-0.137	-0.59	MX
R68RLG		2.273	0.123	0.82	3.937	0.135	0.58	MD
RNFTZU		2.113	-0.037	-0.25	3.760	-0.042	-0.18	MC
T3AJDH		2.265	0.114	0.77	3.948	0.146	0.63	MR
TQ6VKU		2.193	0.043	0.29	3.925	0.123	0.53	MC
Y2ZM9F		2.038	-0.112	-0.75	3.645	-0.157	-0.68	ME
ZM3AQ4		2.502	0.351	2.36	4.377	0.575	2.49	MC

Summary Statistics

Grand Means	2.1505 minutes	3.8021 minutes
Stnd Dev Btwn Labs	0.1489 minutes	0.2307 minutes

Statistics based on 33 of 38 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #685

3T446W (X) - Data for all samples are low. Inconsistent within the determinations of sample group X37-X38.

F4QA4E (X) - Data for all samples are low.

JGEW3C (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both sample groups.

NRV8H6 (X) - Data for sample group X35-X36 are high and data for sample group X37-X38 are low.

P8P2LH (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample group X37-X38.

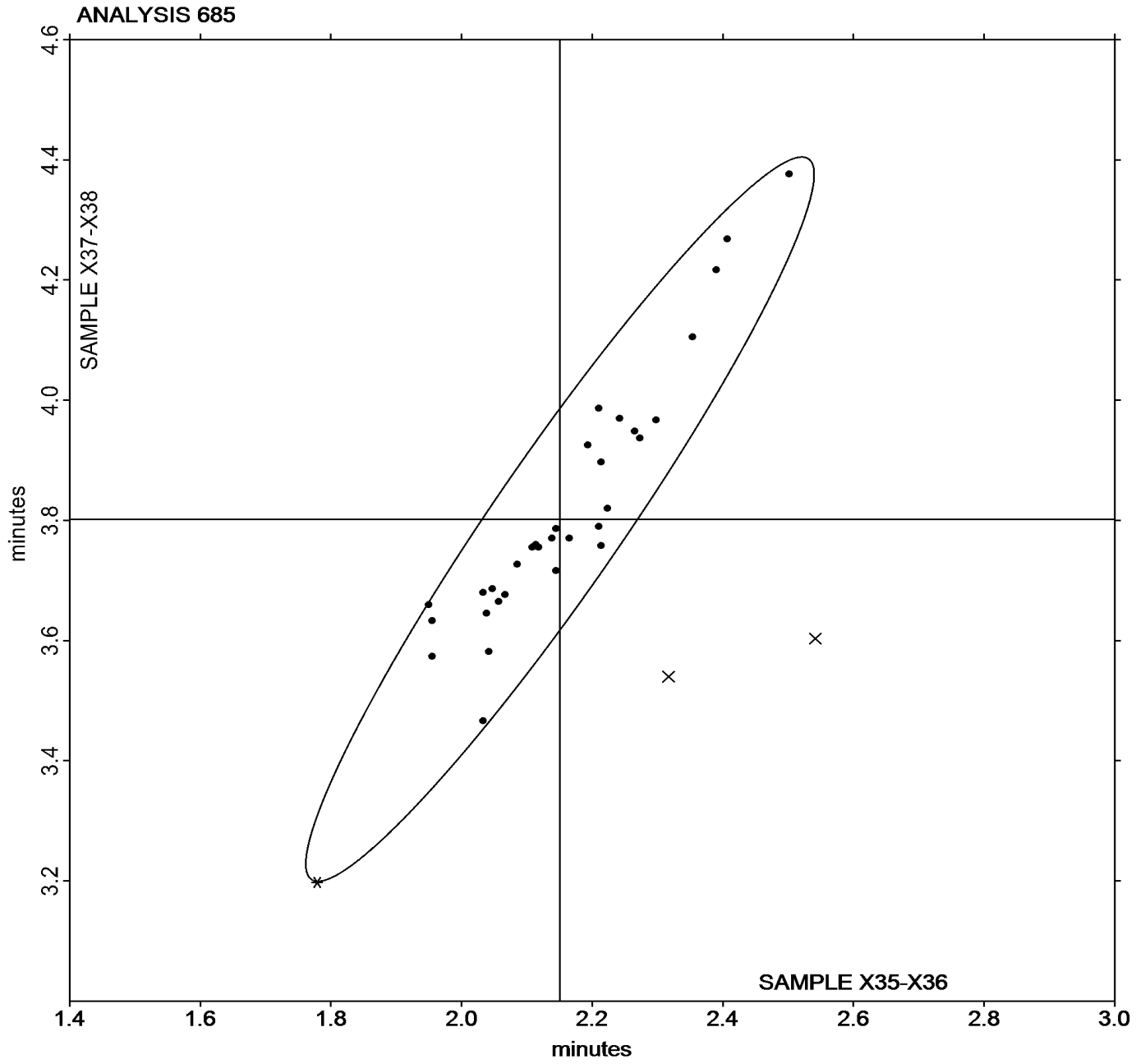
Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	MX	Rebuilt MonTech Alpha
XX	Instrument model not specified by lab		

MDR Vulcanization-Scorch Time, Ts1 (minutes)

Grand Mean Sample **X35-X36** = 2.1505 minutes

Grand Mean Sample **X37-X38** = 3.8021 minutes



WebCode	Data Flag	Sample X35-X36 Lab Mean	Diff from Grand Mean	CPV	Sample X37-X38 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3T446W		6.385	-0.019	-0.07	6.840	-0.361	-1.77	MR
48VFRQ		6.195	-0.209	-0.75	7.232	0.030	0.15	MD
4KJ7BN		6.707	0.302	1.08	7.008	-0.193	-0.94	ME
4KKGBH		6.272	-0.133	-0.48	7.272	0.070	0.34	ME
6QN6KT		6.648	0.244	0.88	7.478	0.277	1.35	ME
6TDB6P	X	7.378	0.974	3.49	7.857	0.655	3.20	ME
74T2JR		6.282	-0.123	-0.44	7.063	-0.138	-0.67	MC
7FKMPL		6.392	-0.013	-0.05	7.292	0.090	0.44	MC
8XB22C	*	6.175	-0.229	-0.82	7.728	0.527	2.57	ME
B4RU6R		6.588	0.184	0.66	7.013	-0.188	-0.92	MR
BKFR6G		6.017	-0.388	-1.39	7.377	0.175	0.86	ME
C97RCE		6.917	0.512	1.84	7.135	-0.066	-0.32	XX
EY89LV		6.438	0.034	0.12	7.033	-0.168	-0.82	MC
F4QA4E	X	3.873	-2.531	-9.08	4.693	-2.508	-12.25	MC
FKZK3Z		6.418	0.014	0.05	7.377	0.175	0.86	MC
GWVB6J		6.758	0.354	1.27	7.123	-0.078	-0.38	ME
H7XQT3		6.570	0.166	0.59	7.330	0.129	0.63	MC
HEUJ64		6.447	0.042	0.15	7.230	0.029	0.14	MC
JGEW3C		6.303	-0.101	-0.36	7.072	-0.130	-0.63	XX
JP93WD		6.157	-0.248	-0.89	6.993	-0.208	-1.02	ME
KCBM3U		6.287	-0.118	-0.42	7.325	0.124	0.60	MC
KWX83J		5.918	-0.486	-1.74	6.932	-0.270	-1.32	XX
LF7U4H		6.693	0.289	1.04	7.318	0.117	0.57	MR
LGHV7Y		6.453	0.049	0.18	6.738	-0.463	-2.26	MC
LHFLEJ	*	5.658	-0.746	-2.68	7.333	0.132	0.64	MD
LHZFYU		6.418	0.013	0.05	7.376	0.174	0.85	MC
LKPMJQ		6.435	0.031	0.11	7.007	-0.195	-0.95	MC
LPJJ7W		6.732	0.327	1.17	7.453	0.252	1.23	MC
MU63FP		6.062	-0.343	-1.23	7.100	-0.101	-0.50	MC
N8QULC		6.085	-0.319	-1.15	7.392	0.190	0.93	MM
NRV8H6		6.897	0.492	1.77	6.957	-0.245	-1.20	MC
P8P2LH		6.100	-0.304	-1.09	7.282	0.080	0.39	MC
PFVHX4		6.588	0.184	0.66	7.398	0.197	0.96	MX
R68RLG		6.415	0.011	0.04	7.227	0.025	0.12	MD
RNFTZU		6.695	0.291	1.04	7.187	-0.015	-0.07	MC
T3AJDH		6.663	0.259	0.93	7.433	0.232	1.13	MR
TQ6VKU		6.503	0.099	0.35	7.155	-0.046	-0.23	MC
Y2ZM9F		6.290	-0.114	-0.41	7.043	-0.158	-0.77	ME

WebCode	Data Flag	Sample X35-X36 Lab Mean	Sample X35-X36 Diff from Grand Mean	Sample X35-X36 CPV	Sample X37-X38 Lab Mean	Sample X37-X38 Diff from Grand Mean	Sample X37-X38 CPV	Instr Code
ZM3AQ4	X	6.190	-0.214	-0.77	8.033	0.832	4.06	MC

Summary Statistics

	Sample X35-X36	Sample X37-X38
Grand Means	6.4045 minutes	7.2015 minutes
Stnd Dev Btwn Labs	0.2787 minutes	0.2047 minutes

Statistics based on 36 of 39 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #686

6TDB6P (X) - Data for all samples are high. Inconsistent within the determinations of sample group X37-X38.

F4QA4E (X) - Data for all Samples are low.

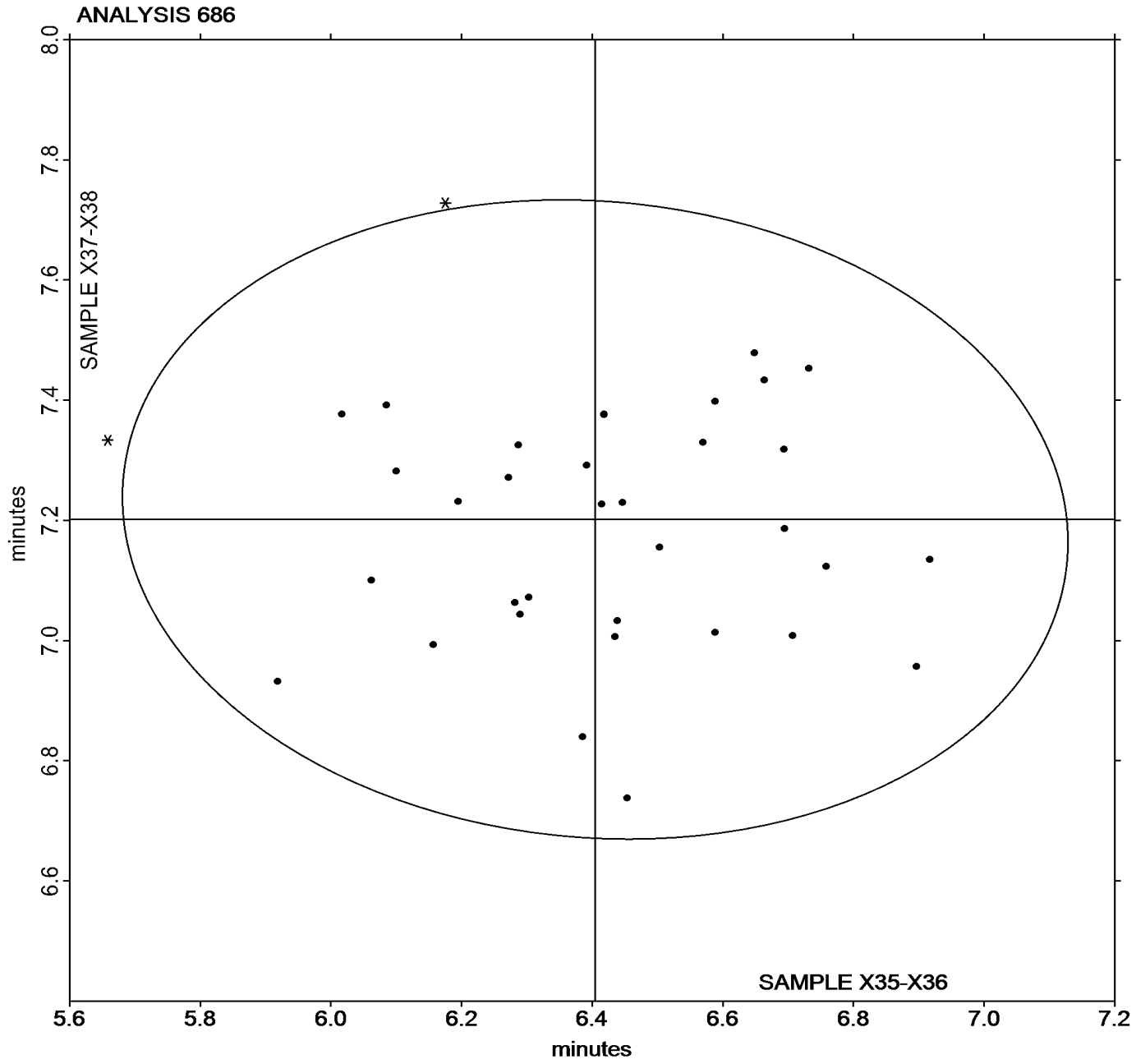
ZM3AQ4 (X) - Data for sample group X37-X38 are high.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	MX	Rebuilt MonTech Alpha
XX	Instrument model not specified by lab		

Grand Mean Sample **X35-X36** = 6.4045 minutes

Grand Mean Sample **X37-X38** = 7.2015 minutes



WebCode	Data Flag	Sample X35-X36 Lab Mean	Diff from Grand Mean	CPV	Sample X37-X38 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3T446W		11.21	0.24	0.66	11.03	-0.27	-0.74	MR
48VFRQ		10.50	-0.46	-1.26	11.21	-0.09	-0.24	MD
4KJ7BN		11.08	0.11	0.30	10.77	-0.53	-1.47	ME
4KKGBH		10.86	-0.11	-0.30	11.51	0.21	0.58	ME
6QN6KT		11.21	0.24	0.66	11.79	0.49	1.35	ME
6TDB6P	*	12.04	1.07	2.91	11.79	0.49	1.36	ME
74T2JR		10.87	-0.10	-0.27	11.00	-0.31	-0.84	MC
7FKMPL		11.09	0.13	0.35	11.34	0.04	0.10	MC
8XB22C	*	10.39	-0.57	-1.56	11.86	0.56	1.54	ME
B4RU6R		11.01	0.05	0.13	11.28	-0.03	-0.07	MR
BKFR6G		10.38	-0.59	-1.60	11.28	-0.02	-0.05	ME
C97RCE		11.62	0.65	1.77	11.86	0.56	1.55	XX
EY89LV		10.56	-0.41	-1.11	11.23	-0.08	-0.21	MC
F4QA4E	X	6.89	-4.08	-11.10	7.75	-3.56	-9.81	MC
FKZK3Z		11.30	0.33	0.91	11.71	0.41	1.13	MC
GWVB6J		10.93	-0.03	-0.09	10.67	-0.63	-1.75	ME
H7XQT3		11.04	0.07	0.19	11.45	0.15	0.41	MC
HEUJ64		10.93	-0.03	-0.09	11.42	0.12	0.33	MC
JGEW3C		10.76	-0.21	-0.56	10.97	-0.33	-0.92	XX
JP93WD		10.63	-0.33	-0.90	11.10	-0.20	-0.56	ME
KCBM3U		10.71	-0.25	-0.69	10.98	-0.32	-0.89	MC
KWX83J		10.35	-0.62	-1.67	11.02	-0.28	-0.77	XX
LF7U4H		11.68	0.71	1.93	12.02	0.72	1.99	MR
LGHV7Y	*	10.94	-0.02	-0.06	10.24	-1.06	-2.92	MC
LHFLEJ	X	9.44	-1.52	-4.15	11.33	0.03	0.09	MD
LHZFYU		10.91	-0.05	-0.14	11.19	-0.11	-0.31	MC
LKPMJQ		10.99	0.03	0.08	11.27	-0.03	-0.09	MC
LPJJ7W		11.26	0.29	0.80	11.62	0.32	0.89	MC
MU63FP		10.47	-0.49	-1.34	11.18	-0.12	-0.33	MC
N8QULC		10.71	-0.25	-0.69	11.58	0.27	0.76	MM
NRV8H6		11.00	0.03	0.09	11.00	-0.30	-0.83	MC
P8P2LH		10.82	-0.14	-0.39	11.47	0.16	0.45	MC
PFVHX4		11.33	0.37	1.00	11.38	0.07	0.21	MX
R68RLG		10.87	-0.10	-0.26	11.21	-0.10	-0.26	MD
RNFTZU		11.17	0.21	0.56	11.29	-0.01	-0.03	MC
T3AJDH		11.27	0.30	0.83	11.46	0.15	0.43	MR
TQ6VKU		11.01	0.04	0.11	11.48	0.17	0.48	MC
Y2ZM9F		10.85	-0.11	-0.30	11.21	-0.10	-0.26	ME

Rubber Interlaboratory Testing Program

Analysis 687

MDR Vulcanization-Cure Time 90% (minutes)

WebCode	Data Flag	Sample X35-X36 Lab Mean	Sample X35-X36 Diff from Grand Mean	Sample X35-X36 CPV	Sample X37-X38 Lab Mean	Sample X37-X38 Diff from Grand Mean	Sample X37-X38 CPV	Instr Code
ZM3AQ4	X	12.85	1.88	5.13	17.35	6.04	16.68	MC

Summary Statistics

	Sample X35-X36	Sample X37-X38
Grand Means	10.965 minutes	11.300 minutes
Stnd Dev Btwn Labs	0.367 minutes	0.362 minutes

Statistics based on 36 of 39 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #687

F4QA4E (X) - Data for all Samples are low.

LHFLEJ (X) - Data for sample group X35-X36 are low.

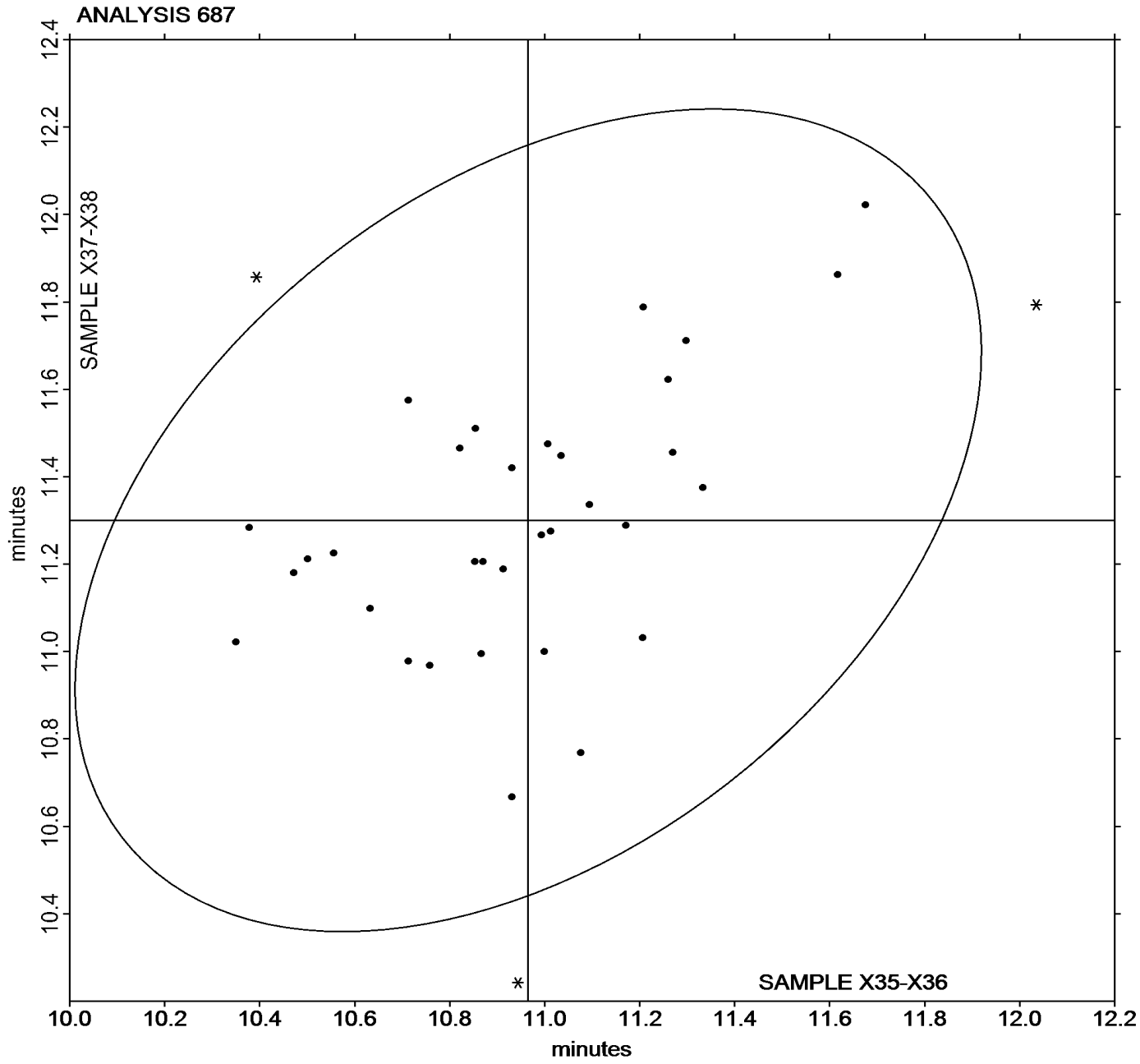
ZM3AQ4 (X) - Data for all samples are high. Inconsistent within the determinations of both sample groups.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	MX	Rebuilt MonTech Alpha
XX	Instrument model not specified by lab		

Grand Mean Sample **X35-X36** = 10.965 minutes

Grand Mean Sample **X37-X38** = 11.300 minutes



		Sample X35-X36			Sample X37-X38			
WebCode	Data Flag	Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	Instr Code
3T446W	*	2.838	0.093	0.26	1.720	-0.107	-0.74	MR
48VFRQ		2.323	-0.423	-1.19	1.638	-0.189	-1.29	MD
4KJ7BN		2.588	-0.157	-0.44	1.762	-0.066	-0.45	ME
4KKGBH	*	3.113	0.368	1.04	2.090	0.263	1.80	ME
6QN6KT		2.427	-0.318	-0.90	1.735	-0.093	-0.63	ME
6TDB6P		2.692	-0.053	-0.15	1.808	-0.019	-0.13	ME
74T2JR		2.757	0.012	0.03	1.833	0.006	0.04	MC
7FKMPL		2.485	-0.260	-0.73	1.725	-0.102	-0.70	MC
8XB22C		3.223	0.478	1.35	1.997	0.170	1.16	ME
B4RU6R		2.447	-0.298	-0.84	1.743	-0.084	-0.58	MR
BKFR6G		3.373	0.628	1.78	2.075	0.248	1.70	ME
C97RCE		2.649	-0.096	-0.27	1.859	0.031	0.21	XX
EY89LV		2.384	-0.361	-1.02	1.676	-0.152	-1.04	MC
F4QA4E		3.320	0.575	1.62	2.015	0.188	1.29	MC
FKZK3Z		2.500	-0.245	-0.69	1.776	-0.051	-0.35	MC
GWVB6J		2.175	-0.570	-1.61	1.535	-0.292	-2.00	ME
H7XQT3		2.903	0.158	0.45	1.922	0.095	0.65	MC
HEUJ64		2.383	-0.362	-1.02	1.672	-0.156	-1.07	MC
JGEW3C	X	3.965	1.220	3.45	2.412	0.584	4.00	XX
JP93WD		2.685	-0.060	-0.17	1.805	-0.022	-0.15	ME
KCBM3U		3.130	0.385	1.09	1.953	0.126	0.86	MC
KWX83J		2.738	-0.007	-0.02	1.807	-0.021	-0.14	MM
LF7U4H		2.477	-0.268	-0.76	1.757	-0.071	-0.48	MR
LGHV7Y		2.604	-0.141	-0.40	1.733	-0.094	-0.64	MC
LHFLEJ		2.837	0.092	0.26	1.897	0.069	0.48	MD
LHZFYU		2.701	-0.044	-0.12	1.741	-0.087	-0.59	MC
LKPMJQ		2.517	-0.228	-0.65	1.743	-0.084	-0.58	MC
LPJJ7W		2.502	-0.243	-0.69	1.740	-0.087	-0.60	MC
MU63FP		3.412	0.667	1.88	2.155	0.328	2.25	MC
N8QULC		3.167	0.422	1.19	1.985	0.158	1.08	MM
NRV8H6	X	1.848	-0.897	-2.53	1.827	-0.001	0.00	MC
P8P2LH	*	3.293	0.548	1.55	1.902	0.074	0.51	MC
PFVHX4		2.755	0.010	0.03	1.838	0.011	0.08	MX
R68RLG		2.547	-0.198	-0.56	1.777	-0.051	-0.35	MD
RNFTZU		2.485	-0.260	-0.73	1.742	-0.086	-0.59	MC
T3AJDH		2.700	-0.045	-0.13	1.850	0.023	0.16	MR
TQ6VKU		2.545	-0.200	-0.57	1.745	-0.082	-0.56	MC
Y2ZM9F		2.335	-0.410	-1.16	1.690	-0.137	-0.94	ME

WebCode	Data Flag	Sample X35-X36 Lab Mean	Sample X35-X36 Diff from Grand Mean	Sample X35-X36 CPV	Sample X37-X38 Lab Mean	Sample X37-X38 Diff from Grand Mean	Sample X37-X38 CPV	Instr Code
ZM3AQ4		3.558	0.813	2.30	2.170	0.343	2.35	MC

Summary Statistics

	X35-X36	X37-X38
Grand Means	2.7450 lbf.in	1.8273 lbf.in
Stnd Dev Btwn Labs	0.3539 lbf.in	0.1459 lbf.in

Statistics based on 37 of 39 reporting participants

Summary Statistics in SI Units

	X35-X36	X37-X38
Grand Means	3.1015 dN.m	2.0646 dN.m
Stnd Dev Btwn Labs	0.3999 dN.m	0.1649 dN.m

Statistics based on 37 of 39 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #688

JGEW3C (X) - Data for all samples are high. Inconsistent within the determinations of sample group X37-X38.

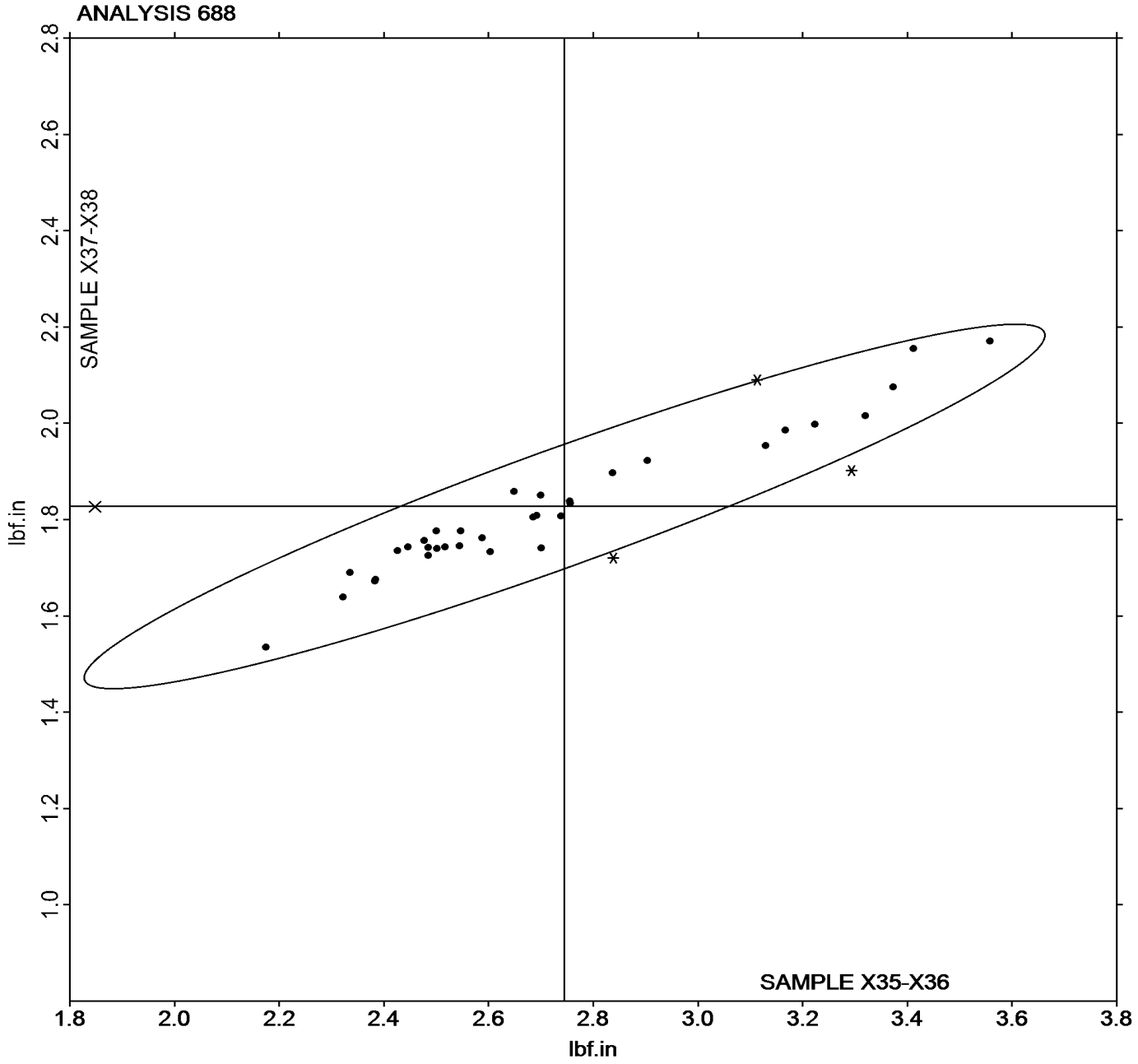
NRV8H6 (X) - Inconsistent in testing between samples.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	MX	Rebuilt MonTech Alpha
XX	Instrument model not specified by lab		

Grand Mean Sample **X35-X36** = 2.7450 lbf.in

Grand Mean Sample **X37-X38** = 1.8273 lbf.in



WebCode	Data Flag	Sample X35-X36 Lab Mean	Diff from Grand Mean	CPV	Sample X37-X38 Lab Mean	Diff from Grand Mean	CPV	Instr Code
3T446W		15.75	1.19	1.55	7.780	0.382	0.68	MR
48VFRQ		13.94	-0.62	-0.81	7.287	-0.111	-0.20	MD
4KJ7BN		14.32	-0.24	-0.32	6.700	-0.698	-1.25	ME
4KKGBH		16.15	1.59	2.07	8.162	0.764	1.36	ME
6QN6KT		14.45	-0.10	-0.14	7.274	-0.124	-0.22	ME
6TDB6P		14.57	0.01	0.01	7.280	-0.118	-0.21	ME
74T2JR		13.94	-0.62	-0.80	7.027	-0.371	-0.66	MC
7FKMPL		14.57	0.01	0.02	7.623	0.225	0.40	MC
8XB22C		14.97	0.41	0.53	7.992	0.594	1.06	ME
B4RU6R		14.46	-0.10	-0.12	7.227	-0.171	-0.31	MR
BKFR6G		15.24	0.68	0.88	7.940	0.542	0.97	ME
C97RCE		14.13	-0.43	-0.56	6.473	-0.925	-1.65	XX
EY89LV		13.60	-0.96	-1.25	6.876	-0.523	-0.93	MC
F4QA4E		14.98	0.42	0.55	8.062	0.664	1.19	MC
FKZK3Z		14.25	-0.31	-0.41	7.184	-0.214	-0.38	MC
GWVB6J		13.00	-1.56	-2.03	6.185	-1.213	-2.17	ME
H7XQT3		14.36	-0.19	-0.25	6.994	-0.405	-0.72	MC
HEUJ64		14.13	-0.43	-0.56	7.275	-0.123	-0.22	MC
JGEW3C	*	16.83	2.27	2.95	9.015	1.617	2.89	XX
JP93WD		14.12	-0.44	-0.57	7.043	-0.355	-0.63	ME
KCBM3U		15.09	0.53	0.69	7.613	0.215	0.38	MC
KWX83J		13.91	-0.65	-0.84	7.347	-0.051	-0.09	MM
LF7U4H		14.08	-0.48	-0.62	6.992	-0.406	-0.73	MR
LGHV7Y		15.02	0.46	0.60	7.134	-0.264	-0.47	MC
LHFLEJ		16.16	1.60	2.08	8.533	1.135	2.03	MD
LHZFYU		14.67	0.11	0.15	7.441	0.042	0.08	MC
LKPMJQ		13.89	-0.67	-0.88	6.900	-0.498	-0.89	MC
LPJJ7W		14.04	-0.52	-0.68	6.907	-0.491	-0.88	MC
MU63FP		15.37	0.81	1.05	8.133	0.735	1.31	MC
N8QULC		13.54	-1.02	-1.33	7.342	-0.056	-0.10	MM
NRV8H6	X	7.56	-7.00	-9.12	7.900	0.502	0.90	MC
P8P2LH		13.96	-0.60	-0.78	7.580	0.182	0.32	MC
PFVHX4		14.22	-0.34	-0.44	7.432	0.034	0.06	MX
R68RLG		14.21	-0.35	-0.46	7.132	-0.266	-0.48	MD
RNFTZU		14.66	0.10	0.13	7.202	-0.196	-0.35	MC
T3AJDH		14.71	0.15	0.19	7.325	-0.073	-0.13	MR
TQ6VKU		14.32	-0.24	-0.31	7.085	-0.313	-0.56	MC
Y2ZM9F		14.66	0.10	0.14	7.457	0.059	0.10	ME

WebCode	Data Flag	Sample X35-X36 Lab Mean	Sample X35-X36 Diff from Grand Mean	Sample X35-X36 CPV	Sample X37-X38 Lab Mean	Sample X37-X38 Diff from Grand Mean	Sample X37-X38 CPV	Instr Code
ZM3AQ4		15.00	0.44	0.57	8.180	0.782	1.40	MC

Summary Statistics

	Sample X35-X36	Sample X37-X38
Grand Means	14.559 lbf.in	7.3981 lbf.in
Stnd Dev Btwn Labs	0.768 lbf.in	0.5599 lbf.in

Statistics based on 38 of 39 reporting participants

Summary Statistics in SI Units

	Sample X35-X36	Sample X37-X38
Grand Means	16.449 dN.m	8.3588 dN.m
Stnd Dev Btwn Labs	0.867 dN.m	0.6326 dN.m

Statistics based on 38 of 39 reporting participants

Samples X35-X36: EPDM compound, batch #1 & X37-X38: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #689

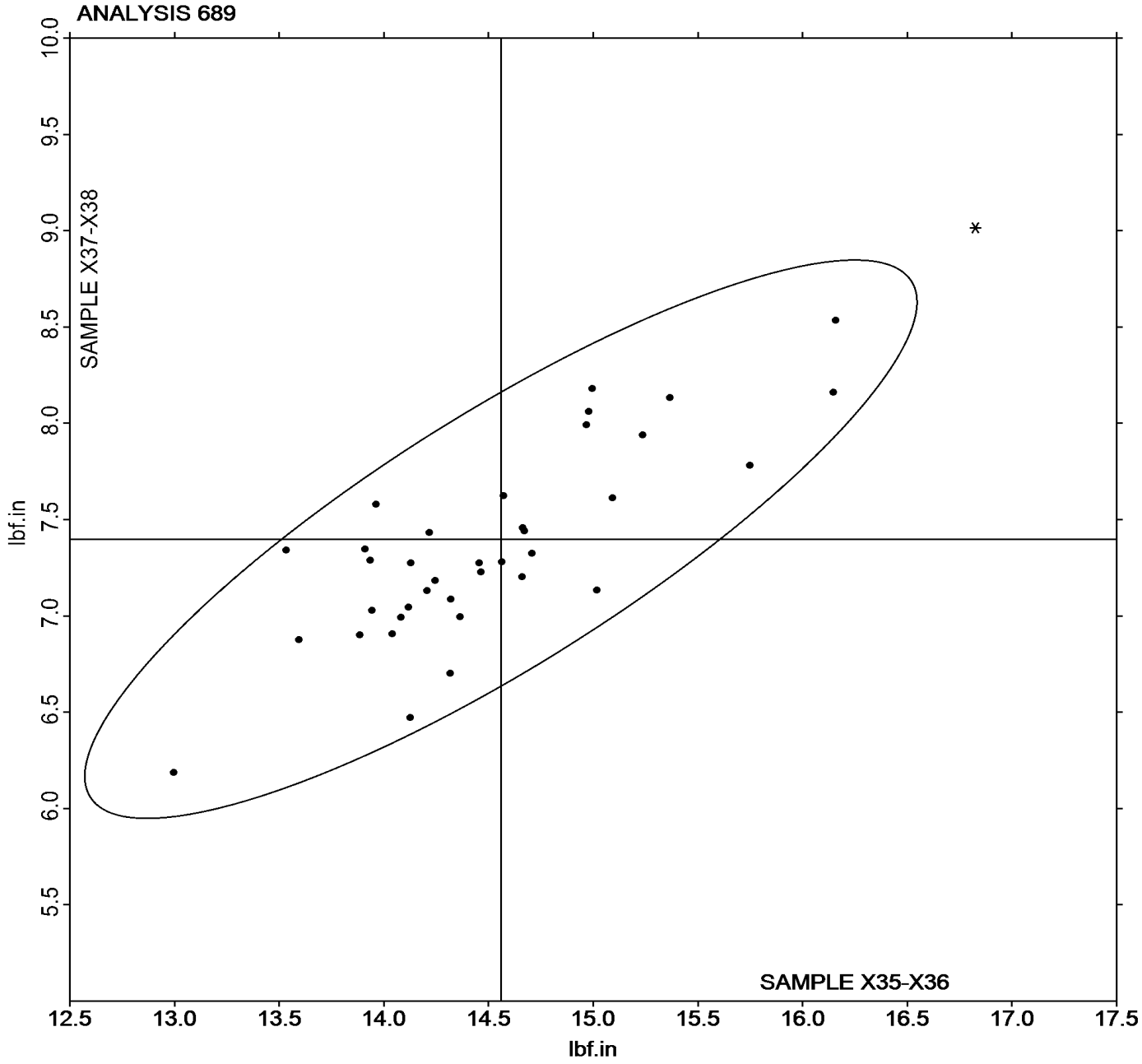
NRV8H6 (X) - Data for sample group X35-X36 are low.

Key to Instrument Codes Reported by Participants

MC	Alpha Technologies [Monsanto] MDR 2000 or 2000E	MD	Alpha Tech. Rubber Process Analyzer (RPA 2000)
ME	Alpha Tech. MDR Premiere	MM	MonTech MDR 3000
MR	MonTech D-RPA 3000	MX	Rebuilt MonTech Alpha
XX	Instrument model not specified by lab		

Grand Mean Sample **X35-X36** = 14.559 lbf.in

Grand Mean Sample **X37-X38** = 7.3981 lbf.in



WebCode	Data Flag	Sample F31-F32 Lab Mean	Diff from Grand Mean	CPV	Sample F33-F34 Lab Mean	Diff from Grand Mean	CPV	Instr Code
48VFRQ		644.0	5.1	0.11	334.1	-5.3	-0.22	RP
6QN6KT		671.8	32.9	0.72	359.1	19.7	0.82	XX
C97RCE		686.5	47.6	1.05	376.2	36.7	1.53	XX
LHFLEJ		666.2	27.3	0.60	356.4	17.0	0.70	RP
LHZFYU		591.1	-47.7	-1.05	313.0	-26.4	-1.10	RP
RQPK8P		648.3	9.5	0.21	332.9	-6.5	-0.27	XX
TQ6VKU		550.7	-88.2	-1.94	303.9	-35.6	-1.48	PR
Y2ZM9F		652.4	13.6	0.30	339.8	0.4	0.02	RP

Summary Statistics

	Sample F31-F32	Sample F33-F34
Grand Means	638.88 kPa	339.41 kPa
Stnd Dev Btwn Labs	45.44 kPa	24.08 kPa

Statistics based on 8 of 8 reporting participants

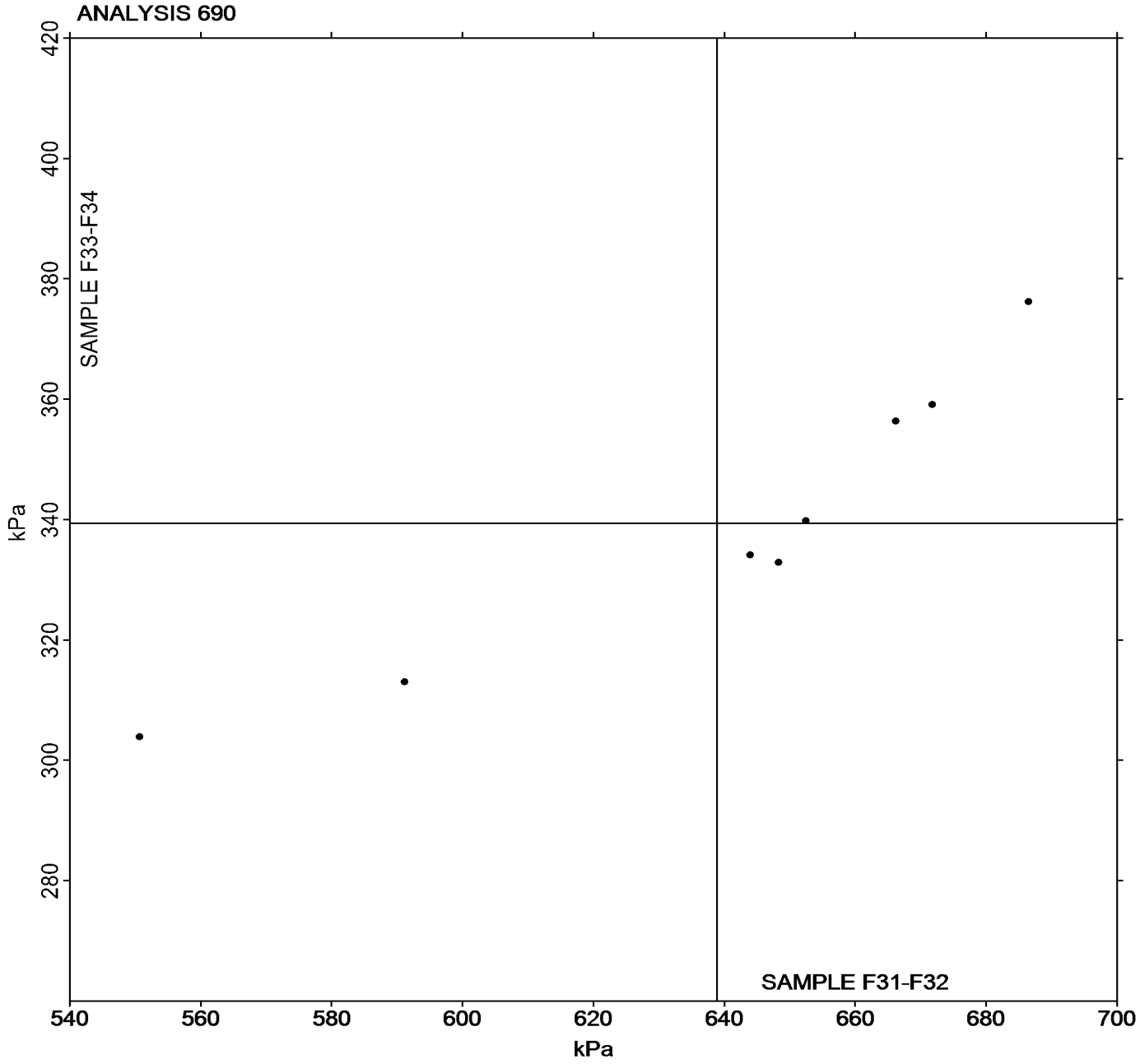
Samples F31-F32: EPDM compound, batch #1 & F33-F34: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **F31-F32** = 638.88 kPa

Grand Mean Sample **F33-F34** = 339.41 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

Analysis 691

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

WebCode	Data Flag	Sample F31-F32 Lab Mean	Sample F31-F32 Diff from Grand Mean	Sample F31-F32 CPV	Sample F33-F34 Lab Mean	Sample F33-F34 Diff from Grand Mean	Sample F33-F34 CPV	Instr Code
48VFRQ		237.2	-5.2	-0.30	102.9	-4.7	-0.55	RP
6QN6KT		251.4	9.1	0.52	111.7	4.1	0.47	XX
C97RCE		277.0	34.7	2.00	124.2	16.6	1.94	XX
LHFLEJ		246.4	4.1	0.24	114.7	7.2	0.83	RP
LHZFYU		222.2	-20.1	-1.16	99.3	-8.3	-0.97	RP
RQPK8P		228.2	-14.1	-0.81	100.9	-6.7	-0.79	XX
TQ6VKU		229.5	-12.8	-0.74	102.6	-5.0	-0.58	PR
Y2ZM9F		246.6	4.3	0.24	104.6	-3.0	-0.35	RP

Summary Statistics

	Sample F31-F32	Sample F33-F34
Grand Means	242.31 kPa	107.59 kPa
Stnd Dev Btwn Labs	17.40 kPa	8.57 kPa

Statistics based on 8 of 8 reporting participants

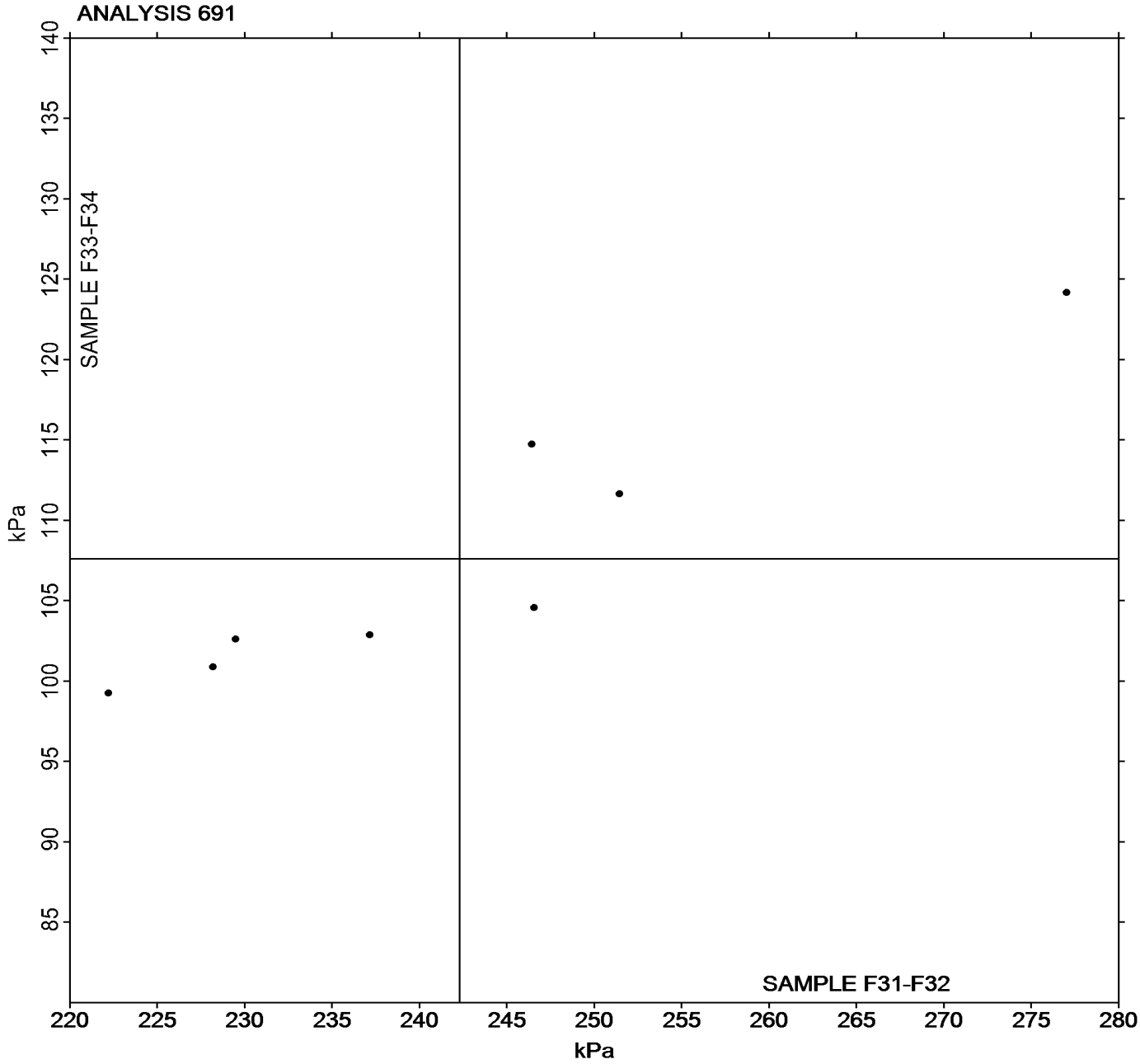
Samples F31-F32: EPDM compound, batch #1 & F33-F34: EPDM compound, batch #2

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **F31-F32** = 242.31 kPa

Grand Mean Sample **F33-F34** = 107.59 kPa



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

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

WebCode	Data Flag	Sample F31-F32 Lab Mean	Sample F31-F32 Diff from Grand Mean	Sample F31-F32 CPV	Sample F33-F34 Lab Mean	Sample F33-F34 Diff from Grand Mean	Sample F33-F34 CPV	Instr Code
48VFRQ		98.60	8.21	0.40	59.72	6.04	0.59	RP
6QN6KT		102.48	12.10	0.59	62.51	8.82	0.86	XX
C97RCE		91.14	0.76	0.04	54.82	1.14	0.11	XX
LHFLEJ		75.27	-15.12	-0.74	44.20	-9.49	-0.92	RP
LHZFYU		60.09	-30.29	-1.49	37.28	-16.41	-1.60	RP
RQPK8P		123.01	32.63	1.60	65.99	12.30	1.20	XX
TQ6VKU		82.11	-8.28	-0.41	51.29	-2.40	-0.23	PR
Y2ZM9F	X	323.85	233.46	11.45	202.14	148.45	14.47	RP

Summary Statistics

	Sample F31-F32	Sample F33-F34
Grand Means	90.386 kPa	53.687 kPa
Stnd Dev Btwn Labs	20.387 kPa	10.262 kPa

Statistics based on 7 of 8 reporting participants

Samples F31-F32: EPDM compound, batch #1 & F33-F34: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #695

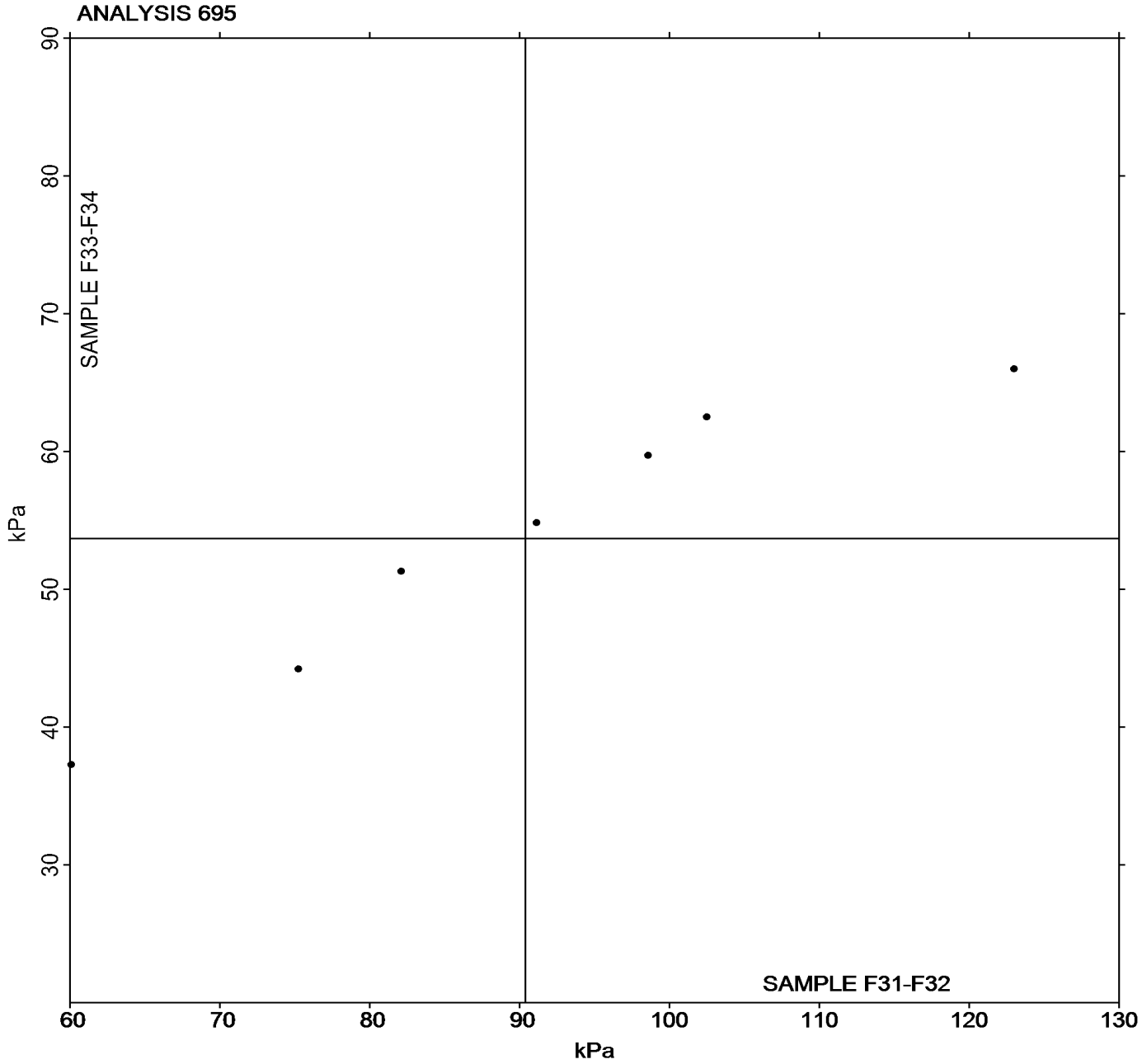
Y2ZM9F (X) - Extreme Data.

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **F31-F32** = 90.386 kPa

Grand Mean Sample **F33-F34** = 53.687 kPa



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

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

WebCode	Data Flag	Sample F31-F32 Lab Mean	Sample F31-F32 Diff from Grand Mean	Sample F31-F32 CPV	Sample F33-F34 Lab Mean	Sample F33-F34 Diff from Grand Mean	Sample F33-F34 CPV	Instr Code
48VFRQ		100.66	12.27	0.66	53.01	4.41	0.51	RP
6QN6KT		104.27	15.87	0.86	55.83	7.23	0.84	XX
C97RCE		95.75	7.36	0.40	53.98	5.38	0.63	XX
LHFLEJ		93.62	5.23	0.28	51.41	2.82	0.33	RP
LHZFYU		49.81	-38.59	-2.09	30.44	-18.16	-2.11	RP
RQPK8P		93.19	4.80	0.26	49.30	0.70	0.08	XX
TQ6VKU		81.45	-6.95	-0.38	46.21	-2.38	-0.28	PR
Y2ZM9F	X	174.16	85.77	4.65	93.12	44.52	5.17	RP

Summary Statistics

	Sample F31-F32	Sample F33-F34
Grand Means	88.391 kPa	48.598 kPa
Stnd Dev Btwn Labs	18.458 kPa	8.606 kPa

Statistics based on 7 of 8 reporting participants

Samples F31-F32: EPDM compound, batch #1 & F33-F34: EPDM compound, batch #2

Comments on Assigned Data Flags for Test #696

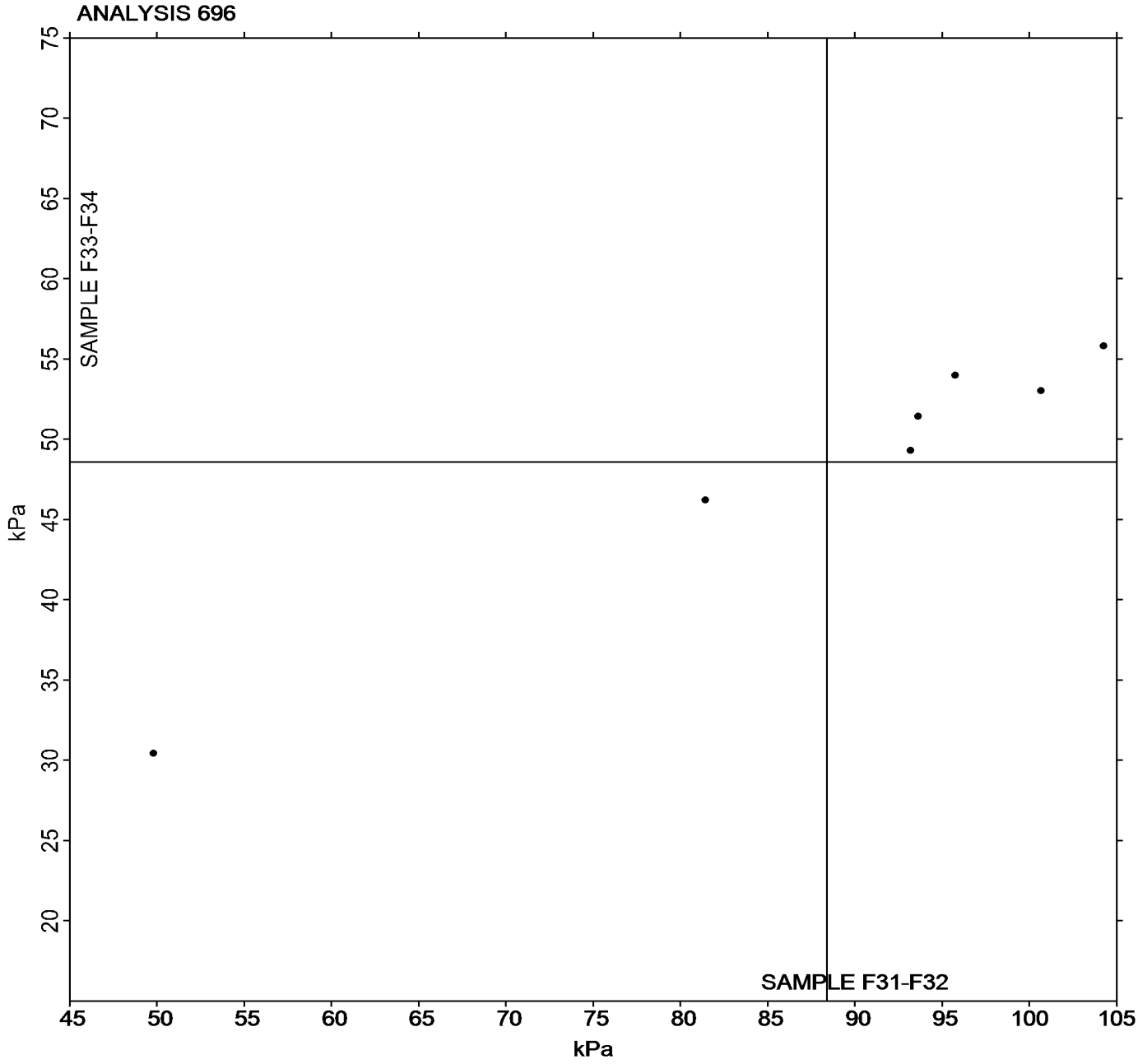
Y2ZM9F (X) - Data for all samples are high.

Key to Instrument Codes Reported by Participants

PR	PRPA 2000	RP	RPA 2000
XX	Instrument model not specified by lab		

Grand Mean Sample **F31-F32** = 88.391 kPa

Grand Mean Sample **F33-F34** = 48.598 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-